DUN'S REVIEW

THIRTY FIVE GENTS DUBLICHED BY DUN & BRADSTREET, INC. SEPTEMBER 1953

Does Small Business Need a New Concept of Salesmanship? Management and Labor Learn Together ... Why Do Businesses Fail? . . . Business Ethics and Global Conflict How Firm a Foundation Heard in Washington Business Trends



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1801 1951

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"That's just how I felt when the office manager asked me to work late again, tonight. This night work was becoming a habit, instead of an occasion. And all because distracting noise in our office kept us from doing a normal day's work in regular office hours."





"I'm the expert who delivered quiet ...

"It didn't take me long to halt the noise jitters in this office. Acousti-Celotex Sound Conditioning brought *immediate* quiet and comfort to every worker. Overtime hours and turnover, too, were cut with this modest investment."





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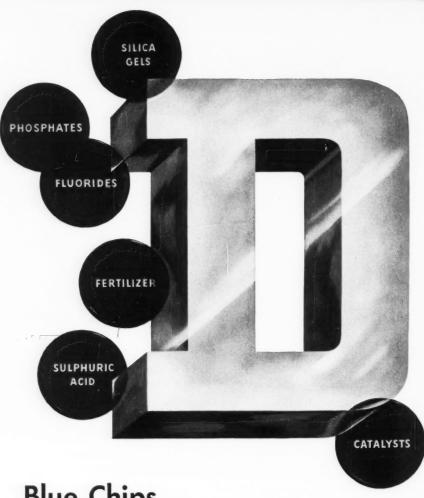
2—Expert Installation to suiteach individual requirement, specification and building code. Over 200,000 Acousti-Celotex installations the country over have solved every type of acoustical problem. That's why you get the right material, correctly installed the first time when you specify Acousti-Celotex products.

3—Guaranteed Materials, Methods and Workmanship. Acousti-Celotex products have the years of scientific research, nationwide organization and time-proved qualities that enable your distributor to guarantee his work, his materials and his Sound Conditioning techniques.

FOR YOUR FREE COPY of the informative booklet, "25 Questions and Answers on Sound Conditioning" and the name of your nearest distributor, write to The Celetex Corporation, Dept. DR-9, 120 South LaSalle St., Chicago 3, Illinois. In Canada, Dominion Sound Equipments, Ltd., Montreal, Quebec.



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PRODUCERS OF: CATALYSTS, INORGANIC ACIDS, SUPERPHOSPHATES, PHOSPHATE ROCK, SILICA GELS, SILICOFLUORIDES AND FERTILIZERS

Heard in WASHINGTON

Despite all the hullabaloo over controls, the international situation continues as the most important factor influencing domestic business. As noted in a recent Federal Reserve report, our economy is subject to ever increasing influences from abroad. Its sensitivity to world developments is constantly being demonstrated.

The prolonged argument about what to discuss at a peace meeting and where the belligerents should stack their arms has been exasperating. Every day that went by meant that more men were killed. This made long debate a serious matter. Russia has lost face decidedly as a result of the inability of her stooges to make military progress in Korea.

Sight should not be lost of the fact that the Russians are strong in terms of manpower only. They are weak because they cannot depend on any one of their satellites and in a pinch they cannot be sure of their own people. Striking because of weakness is sometimes the desperate act of a hard-driven clique. But the Russian leadership is not weak enough for that.

Preparations for war not only stimulate an increase of military strength in western countries, but postpone the day when the problems of democracy and of free enterprise will be acutely posed by changes in economic conditions—disappearance of frontiers, increased self-reliance of colonial people, vastly greater power and consciousness of power by the masses.

It is not difficult, however, for the Communists to make their followers believe capitalism is going to pieces as Marx said it would. They find all the confirmation they need in day-to-day developments in this country.

Special interest groups get what they want. Consumers suffer. Congress is dominated by self-seeking politicians trying to carry favor with the well-organized among their constituents. Confidential data that endangers the nation are made public to gain political advantage, or to cast reflection on the way the executive branch of the Government is being administered. There is wanton waste, graft, and continual bickering.

Our imperfections may give the Communists material for their propaganda, but their effect on fundamentals is not great. The great mass of the American people are busily going about their business of producing and distributing goods and supplying services, paying scant attention to bad things done by some of their fellow citizens. Output is greater than ever. Incomes are high. Never before has income been so well distributed.

Congress probably went too far in amending the production act, particularly in restricting controls on slaughtering and in interfering with indirect controls. Rolling prices back, however, takes property without due compensation. The Constitution has something to say about that. The same principle would be violated were they to take a part of the farmers' land.

In the debate on the control bills there was no effort to spare the administration for failure to put controls in effect a year ago. In January it was too late for direct controls to be effective.

It also is obvious that ceilings cannot be effective when there is little control over wages and agriculture. That makes direct controls more necessary, but Congress is an inflationary-minded body. Instead of strengthenum indirect controls it weakens them.

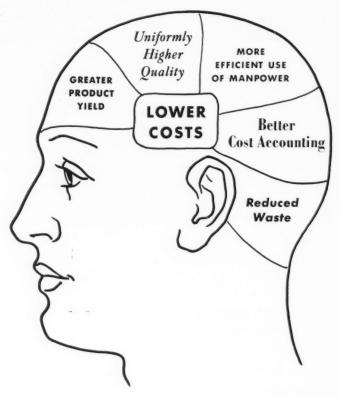
The extent to which regulation W will be effective on an 18-month basis will have to be demonstrated. Experience has shown that a 21-month period for payments did not reduce the rate of buying, while the 15-month period did. Just what will happen under the 18-month provision remains to be seen.

It is apparent that whenever credit restraints become really effective Congress hamstrings them. It is remarkable the influence that pressure groups have. Congress should not attempt to handle the details of credit controls. They should be flexible. Some confidence must be placed in executive agencies.

What price advances are prevented, by the production act as amended? Only unreasonable gouging, which never is an important part of the inflationary process. A perfect inflationary spiral is provided when increased costs and normal profits may be used as a basis for price increases. Restrictions on bank credit still can be relied upon to reduce somewhat the volume of buying and there is the remote chance of buyer resistance asserting itself. It is unlikely, however, that unorganized consumers will exercise adequate self-restraint. Further decline in the buying power of the dollar seems probable.

Que evoton

An Instrument Man has a head for profits!



There's at least one man in every industrial plant who knows how to cut processing costs when raw materials and wages are going up. He knows there is scarcely an industrial process that can't be run better and more economically with up-to-date indicating, recording, and controlling instruments.

Woste ond rejects are automatically reduced when instruments duplicate ideal results time after time. New instrumentation developed in recent months has a degree of accuracy in measurement and control never before thought possible. Miniature recorders and indicators that not only permit smaller control panels and control rooms, but are ideal for the new flow-chart type of graphic panels. Integrating flowmeters isolate departmental processing and heating costs.

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Executives in process industries should ask their Instrument Engineer how instruments can help turn a high cost processing operation into a more profitable one.

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Why Do Businesses Fail? -

The Business Bookshelf

GRIFFITH M. JONES

Assistant to the President, Dun & Bradstreet, Inc.

Here and There in Business - 32



Diesels and electrics perform most of Milwaukee Road freight, passenger and switching service.

FULL THROTTLE!

The men in the cabs of The Milwaukee Road's big diesels can high-ball right along. And, everybody else on the Railroad can go at full throttle, too. The Milwaukee's facilities are modernized to accelerate every operation in the bandling of traffic.

Traffic managers and other executives interested in shipping and distribution in Milwaukee Road territory are invited to ask us for information. We have agents in principal cities — well-informed, transportation men who are eager to serve.

SHIP-TRAVEL

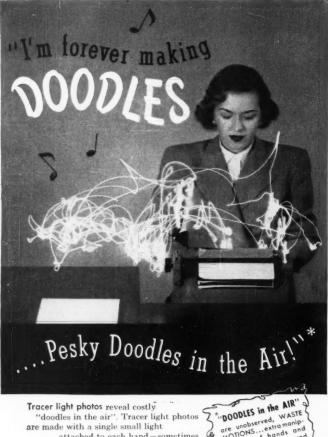
Look at the map!



THE MILWAUKEE

ROAD ROUTE OF THE

CHICAGO MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD



Tracer light photos reveal costly "doodles in the air". Tracer light photos are made with a single small light attached to each hand-sometimes

to equipment. They show how many motions are required to do a specific job like turning out one set of business forms.

American LITHOSTRIP Continuous Forms wipe out wasteful, costly "doodling" . . . elimi-

nate six unnecessary, profit-eating moves in record keeping! Distribution and control are simplified and speeded. A SINGLE typing produces records for all departments . . . fast!

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Without obligation, SEND ME the new illustrated brochure TIME AND MOTION STUDY, showing how we can eliminate "doodles"—save important time, work and money with LITHOSTRIP "PLANNED BUSINESS FORMS."

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UNION SOUARE, 1878

HIS was Union Square in New York City, 1878.

Horsepower was four-legged, trees grew along the streets and bustled ladies strolled the avenues in an atmosphere of comparative calm and quiet except for tiny horse cars which rattled and swaved to the rhythmic clopping of hoofs on granite cobblestones.

City life in 1878 was leisurely. Ulcers and high blood pressure were enjoyed by a select group and the first commercial telephone exchange was opened in New Haven, Conn., on January 25th.

About the only incident to disturb this calm was the daily distribution of newspapers to boys along routes plotted by early publishers with all the timing and strategy of generals on the battlefield.

As the boys met the newswagon their allotment of papers was doled out to them on the run. Then they quickly raced along their "routes" or peddled their papers on street corners to the accompaniment of ear-splitting yells.

The stop-watch delivery of papers has not slowed up over the years—it has just gotten more involved. To-day wire services pretty much deliver the news to member papers simultaneously, scoops grow rarer but "exclusives" take their place in the competitive race for readers and schedules.

The newsboy is still an important cog in newspaper mechanism. In cities and suburbs all over the country, morning and evening, newsboys pedal their bikes up and down and across town, slinging papers right and left, sometimes hitting their mark, sometimes skimming the paper onto the porch roof, or into the shrubbery, or even through a window. Search in the area of the front door will usually disclose its whereabouts-maybe soggy from rain or snow or scattered over the lawn by wind, or torn to shreds by the neighbors' dogs. To the newsboy, the question of where you find the paper is academic, he delivered it-and on schedule.

CLARENCE SWITZER

THE PRINT, "UNION SQUARE, 1878," IS ONE OF A SERIES OF SUR-FECTS CURRENTLY APPEARING ON THE COVERS OF "DUN'S RE-VIEW," THE PRINTS HAVE SHOWN AND WILL CONTINUE TO SHOW SOME OF THE EARLY EVENTS, CIRCUMSTANCES, OR WAYS OF LIFE DURING THE NINETEENTH CENTURY WHICH SO RICHLY CONTRIBUTED TO OUR PRESENT IMPORTANCE AS A PROPLE AND

are unobserved, Whate MOTIONS extra manipulations of hands and

equipment. Invisible red

tape that snarls production

and leaves a trail of errors.

and leaves a trail of error annoyance and fatigue.

You are either <u>OVER</u> paid ... or <u>UNDER</u> paid at \$100 a WEEK!

If you are earning about \$5,000 a year, you have reached the most *critical* stage of your business career.

Few men are paid that amount unless they are potentially worth \$10,000.

It means someone above you thinks you are capable of making at least twice your present salary. But you have to prove it!

Five thousand dollars is not a terminal — a man goes on or back. Clerks can be hired for less; executives can demand more

If you have the resolve and the ambition to pass the \$5,000 barrier, the Alexander Hamilton Institute can help you. If you do not have those qualities, nobody can help you.

HOW TO BRIDGE THE GAP

Here, briefly, is the Institute's function: It stimulates your desire to forge ahead, awakens hidden abilities, supplies the training and knowledge every executive must have. It shows you, by practical examples, the methods and procedures followed by management. It enables you to bridge the gap between your present job and the one above.

Don't misunderstand. The Institute works no miracles, opens no magic portals to quick and easy success; it will not double your income within a few months. Nor will it make corporation presidents of men who are clerks at heart.

But to the man who seeks a sound and realistic program to speed up his progress in business, the Institute's Modern Business Course and Service is ideal. Ideal because it fits the new concept of management, prepares men to handle the *larger* opportunities of business.

Suppose the management of your company met to select a new vice-president, Factory Manager, Sales Manager or Personnel Director. Suppose you were a possible choice for one of those positions.

Are you qualified to step into such a job? Is your knowledge broad enough to meet the requirements of an executive position—or do you know little of business outside of your own department?

Will you be qualified two years from today?

Only men who understand the fundamental principles of all departments of business can safely be trusted with important administrative responsibilities.

The Institute offers you a practical, concentrated means of obtaining that knowledge in your spare time.

SEND FOR FREE BOOKLET

So far as it has been possible to do so, the Institute's executive training plan has been outlined and described in an interesting booklet titled "Forging Ahead in Business."

There is no charge for this little book because it is worth only

There is no charge for this little book because it is worth only what you make it worth. Some men glance through it and toss it aside; others have found a fortune in its pages. It is a serious book about a serious subject; as such, it holds nothing for the merely

But it contains a message of lasting significance to men who are concerned about where they are going in business, and how they are going to get there. To men of this type, copies of "Forging Ahead in Business" are available without cost or obligation. Simply fill in and return the coupon below.



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	"FORGING AHEAD IN BUSINESS."

FORGING AHEAD IN BUSINESS."

Name

Firm Name

Business Address

Position

Home Address

Half a Million More
Tons of Steel
a Year
for Customers of
Birmingham's



TENNESSEE COAL, IRON & RAILROAD COMPANY

T.C.1.—the South's largest steel producer—is now increasing the annual ingot capacity of its Birmingham steel mills from 2,850,000 tons to 3,350,000 tons. This company is also increasing the production of its nearby Fairfield sheet mill to meet the great demand for such galvanized steel products as roofing and siding. At Mobile, Alabama, it is building an extensive iron ore handling terminal which will serve as a transfer point for high grade imported ores.

Announcing these major developments, Arthur V. Wiebel, president of the company, said:

"Since the start of World War II, our steel mills in Birmingham have been operating in excess of rated capacity to meet the growing demand in our Southern market for all kinds of finished steel products. More than 200 products are produced in our sheet mill, wire mill, bar mill, hoop mill, tin mill, plate mill, structural mill and rail mill.

"In the Birmingham district and other sections of the flourishing South, many steel-using plants have located in the past decade. Others have greatly broadened operations.

"Our company has voiced its belief in the continued growth trend of industry in the Birmingham district and its market area by undertaking at this time the largest expansion in its recent history."

BURNIER HAR

The Committee of 100 or any of the undersigned members of the Executive Committee will welcome the opportunity to give you confidential and specific data regarding the advantages of the Birmingham district for your plant, office or warehouse.

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A V Wiebel Fresident Tennessee Coat, tran & Railroad Ci Letters . . .

TO THE EDITOR

LIKE HOME

This is not the first time that I have read Dun's Review, but the June issue which I have just received is unusually impressive.

I wish to comment briefly on the magazine itself. The pastel shades on the cover give it a soft and pleasing appearance and the back is important too, because I think it gives the real answer to the whole problem in two simple words, "relax tension." If we could all find out why tension exists, (a subject of which I am making a study at the moment and have been for the past several months), and could cure it, we would create more orderliness in business and reflect that attitude on those immediately surrounding us and also on others with whom we come in contact in our daily lives. . . .

The story on page 6 about your new home at 99 Church Street sounds almost fautastic. On the other hand, it does show Dun & Bradstreet's interest in their employees and service to their customers. It is a fine thing that we have Dun & Bradstreet and many other companies like them in America.

The success story beginning at page 15 (Behind the President's Desk by S. C. Allyn) also impressed me very much. Do you think it would be good for your readers to hear from the presidents of smaller businesses such as this one which employ fifty or a hundred people but which are nonetheless very important in terms of service to the country? Some of us would have something to ofter which would be at least as good as the success story just published.

I am getting ready now to capture everything good there is in this magazine and my first move will be to write to one of your advertisers, Pope & Vernum, to see if our letterhead can be improved.

> Valentine Hiergesell, President H-B Instrument Co. Philadelphia, Pa.

The picture of your new building at 99 Church Street, New York, N. Y., on the front page of your June issue is indeed interesting.

Having had occasion to visit your offices at 290 Broadway, I am hoping one of these days when in New York I will have an opportunity to see the new building of Dun & Bradstreet and have an opportunity to visit its various offices.

We, here at Poindexters, have had occasion to use Dux & Bradstreet's services in its many forms and certainly



Look-no hands!

with this New Bell & Howell Motorized Microfilm Reader

Here is a new motorized Microfilm Reader that brings greater speed, versatility and convenience to the rapidly growing group of microfilm users. Manufactured by Bell & Howell and distributed by Burroughs, it offers many exclusive advantages.

A new dual pedal control allows the operator to use both hands for transcribing data, punching cards, posting, billing, or other work . . . eliminates extra motions . . . helps her do more work with less effort and greater accuracy. A wide range of speeds, both forward and reverse, gives complete scanning flexibility to suit any purpose.

In addition, all the recognized advantages of high speed manual operation are provided for facilitating the location of random images, or for fast rewinding. The constant-focus feature of this new reader, regardless of film movement, reduces eyestrain and fatigue—helps make for greatly improved operator efficiency.

Business and government will welcome this new microfilm reader with its many advantages. Call your nearest Burroughs office for complete information or write Burroughs Adding Machine Company, Detroit 32, Michigan.

wherever there's business there's Burroughs



THOUGHTS WHILE RETIRING

What a day! One of our biggest customers is caught in the middle of a strike...



If it lasts very long, he'll be in plenty of trouble . . .



Wonder when and if he'll pay his account . . .



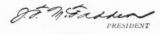
Oh, well . . . if he doesn't pay, our American Credit Insurance will!



Good thing I read this book that tells about planning sound credit policy...and about how American Credit Insurance guarantees payment of Accounts Receivable!



American Credit Insurance completes your program of protection . . . enables you to get cash for past due accounts . . . improves your credit standing with banks and suppliers. An American Credit Insurance policy can be tailored to insure all, a specific group or just one account. Ask the American Credit office in your city for our book, "Why Safe Credits Need Protection," or write American Credit Office, in your city for our book, "Why Safe Credits Need Protection," or write American Credit Tydemnity Company of New York, Dept. 50, First National Bank Bldg., Baltimore 2, Md.



AMERICAN CREDIT

AMERICAN
CREDIT INDEMNITY
COMPANY
OF NEW YORK

GUARANTEES PAYMENT OF ACCOUNTS RECEIVABLE

OFFICES IN PRINCIPAL CITIES OF THE UNITED STATES AND CANADA feel that the stability and efficiency of its service in such an impressive building should be bigger and even bester.

J. B. Kerrigan, Vice-President H. T. Poindexters & Sons Merchandise Co. Kansas City, Mo.

OUR SLIP IS SHEER

Our copy of Dun's Review (June 1951) arrived this morning and as usual I eagerly started to read it. On page 6 the very beautifully executed article over the signature of "The Editors" had what to me was a Freudian slip. The adjective used to describe your new building was spelled "shear" instead of "sheer" probably because its simple lines suggested a straight clipping rather than our twentieth-century connotation of sheer.

To be absolutely sure I consulted a pocket dictionary and was reassured. At first I dismissed any idea of writing to you, but when I reached page 39 with its "Trifles make perfection, and perfection is no trifle." I took typewriter in hand and my courage in tow before pressure of outside trifles would prevent my good intention.

So, please accept our good wishes for much happiness in your new quarters, and pardon my boldness in calling your attention to a proofreader's slip.

Ella Friedman Artick Textiles New York, N. Y.

Sorry, next time it will be spelled correctly with ease.—Ed.

SENT OVERSEAS

We recently received a request from the magazine "Productivity" of Rome, Italy for an article on Quality Control. We feel the article recently published in DUN'S REVIEW May 1951 very aptly covers the requirements of this publication.

May we have your permission to forward a copy of this article directly.

W. L. Harvey Ford Motor Co. Dearborn, Mich

I would very much appreciate if I could be favoured with a copy of the "Old Peddler" and of the new version published on the cover of Den's Review of the January issue of the present year.

I am a lover of these printings, and at the firm where I work I occupy the post of private secretary to the president, I don't believe there will be any objection in favouring me with a copy for my pri-

Thomas George Allan Feigin Hermanos Ltd. S. A. Cordoba, Argentina



Not much bigger than your hat

(but AUDOGRAPH outperforms all other dictation systems)

Just 9½ inches square, so it can't clutter your desk. Its 16 pounds make it *really* portable. The feature-packed Gray Audograph is a remarkable engineering achievement — so simple to use that dictation is a pleasure.

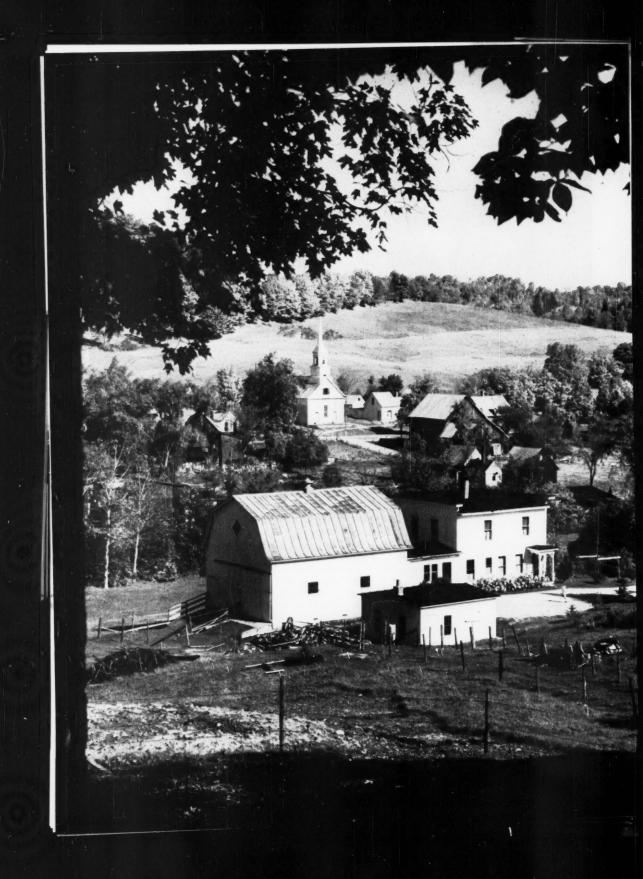
Find out how the versatile AUDOGRAPH can increase your office output up to 30%. You organize your thoughts . . . take your time . . . and soundwrite conferences, sales reports, memos, statistics. And all that while, secretaries are free for other important tasks.

Operation is simple. One-lever control eliminates lifting

the arms...means no complicated adjustments. There's over an hour's dictation time on one flexible plastic disc—a disc that can be resurfaced for reuse up to 50 times! No throwing away after one recording.

The Audograph is engineered from your secretary's viewpoint, too. Its illuminated index has a "traffic light" that flashes red when corrections are coming up, green for end of message. Words come through crystal clear. Tone control gives full treble-to-bass range. Get more information — mail the coupon today.

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THE people seek and appland efforts by business to realize more completely that vital part of the American dream, equality of opportunity. Not only would its complete realization bring the fullest utilization of our greatest asset, human resources, but it would also mark high ground gained on that global battlefield, the hearts and minds of men everywhere.

HAT IS THE FORCE—MORE POWERFUL THAN MILITARY WEAPONS—THAT BUSI-NESS MEN HAVE AT THEIR DISPOSAL TO COUNTER THE THREAT OF SOVIET IMPERIALISM? What can be done, in addition to keeping production high, to ensure the safety OF AMERICA? WHAT ESPECIAL RESPONSIBILITY HAS BUSINESS?

Business Ethics and World Conflict

RALPH I. WATKINS

Director of Research, Dun & BRADSTREET, INC.

This growth of business ethics has

not been a phenomenon apart from our

free society, but part and parcel of that

BUSINESS ethics must find its setting within the general framework of a society. By its very nature, a free society is a complex one, encompassing all the manifold activities of free men and resting on the pervasive foundation of freedom of choice. In the economic sphere we have fashioned a system of business enterprise as one of the concomitants of a free society; and the evolution of that business enterprise system has brought with it a parallel growth of business ethics.

free society and its growth. The American business enterprise system numbers 4 million separate business concerns, and almost 40 million of the 64 million that constitute our labor

force, or nearly two-thirds of the gainfully employed population, secure their livelihood through that system. These 4 million business concerns operate a complex network of contractual relationships, both written and unwritten, with suppliers and customers.

That this network is always subject

to some degree of stress and strain because of unethical practises and from time to time seriously damaged through flagrant deviations from morality, no one in his senses would deny. And likewise no one would deny that this network is always subject to improvement in its functioning through growth in ethical concepts, through more widespread adoption of currently accepted practises, and through improvements in the legal framework within which this network of contractual relationships necessarily operates.

The point to emphasize, however, is that our society does make provision

for growth in ethical concepts, for more widespread adoption of accepted ethical standards, and for continual improvement in the legal framework. Moreover, despite the frequent aberrations and transgressions, this network of contractual relationships is predominantly characterized by commercial probity. If for no other reason, we have learned that good business is dependent on morality, that honest business is good business.

Shady dealings, though always threatening and always to be guarded against by prudent men, cannot long be hidden in the American economy. At any time it may be said that credit investigations have been made on four-fifths or more of the business concerns of the country, and the proportion of business volume accounted for in these investigations is far greater than four-fifths.

Our Moral Climate

Of the 9,162 American business concerns that failed in 1950 with loss to creditors, only 348 or 3.8 per cent were attributable to fraud. Although a code of ethics is not concerned merely with the avoidance of fraud, a fraudulent-failure rate of 3.8 per cent of all failures with loss to creditors, and of only .000 per cent of all business concerns, is not without its significance.

In judging the moral climate of the American business system, as well as the effectiveness of its functioning, a central fact to take into account is that this system is conducted pervasively and overwhelmingly on the basis of credit; and moreover, that the credit instrument which characterizes the system is the simplest, most efficient, and most trusting of all the many forms of credit, namely, open account credit.

Of the millions of transactions which take place every day in the American business system, the vast majority are based on nothing more than an unsecured, unwritten promise to pay. Likewise in our banking system, that it may better serve as a facilitating function of commerce, we have in our social inventiveness developed the simple device of par clearance of bank checks over our continental expanse. In that way we have given unexampled mobility to our promises to pay as well as to our instruments of payment.

In sharp contrast, much of the rest of the world is custom-bound to the slower, more cumbersome, and less trustful devices of banker's and trade acceptances.

Only a business system and a population disciplined to and characterized by commercial probity could make such predominant use of that form of credit which above all merits the slogan "Credit: Man's Confidence in Man."

In the American economy, it may be truly said that we have enthroned the promise to pay; we have built an edifice of commerce continental in scope on the foundation of man's confidence in man. Surely this reliance on open credit is a tribute to the discipline and probity of our business system.

The tests of time have demonstrated that the foundations of a free society can successfully resist the blows that come from the occasional transgressions and deviations from morality implicit in human nature.

Those transgressions and deviations have, in fact, resulted in the continual strengthening of our society through the buttresses we are led to construct from

time to time, in consequence of painful experience and enhanced knowledge of man and his environment. Perhaps we may say that these experiences are the soil in which our code of ethics grows. Each generation adds to that code in the light of its own problems and experiences.

I should not want to leave an impression of complacency. A business enterprise system made up of 4 million business concerns and employing almost 40 million persons will assuredly have its quota of shysters, thieves, and buccaneers. Any objective observer of American business must recognize that he will find elements that are sordid and spurious; some chicanery; some craftiness, deceit, and guile; some charlatanry; much that is cheap and tawdry; and certainly much that offends the pristine concepts of intellectual integrity. These vices, he will hasten to add, are not peculiar to business.

Our business enterprise system, like

As closely related as the fuel and the five; personal freedom and the business enterprise system in America. Products of both the mind and the hands, can be judged most fairly in a free, unhampered market.



Page 16 . D U N 'S



W YORK SKYLINE WITH THE U. N. SECRETARIAT BUILDING ON THE LEFT-CUSHING PHOTOGRAPH

The hope of the free world: America's economic strength and the collective conscience of the United Nations. These two may well become the cantilevers for a bridge across the widening gulf of agression to peace and prosperity.

the free society of which it is part, is far from perfect and indeed can never attain perfection, given the imperfections of man. The problem of business ethics, like the problem of morality generally, is a never-ending business—a constant summons to the best in us. Leaders of business, no less than the leaders of other segments of our society, are sensitive to the need for advancing ethics and to the continual need for structural improvements in our society.

Those who would tear down our free society are fond of charging that the business enterprise system carries within its womb the seeds of its own destruction. The proper answer to that charge—nurtured on the hopes of its authors—is to lay before the world the contrary evidence, yes, the eloquent evidence, that an intelligently led free society can and does continually improve both the effectiveness and the justice of its functioning.

There may be societies which are more egalitarian than ours in the restricted sense of share-and-share-alike, but it is doubtful that any other major society has been equally dedicated to the concept of equality of opportunity, which has been described as the heart of the American dream.

As a societal principle, the concept of equality of opportunity is not only one which serves the highest aims of justice and morality; it is also a principle which serves the aim of efficiency, since through that principle a society can be directed toward full utilization of its greatest asset—its human resources.

In our continuing adherence to that principle of equality of opportunity, we have made notable progress during the past two decades—and not at the fearful costs in human liberty which we have observed in certain other societies.

The transformations wrought in the American economy over the past two decades have given new meaning to our free society, new meaning to our business enterprise system. New social directions have emerged, social inventiveness has advanced, and new concepts of social control have been formulated. Not only have we achieved higher levels of production of wealth and average well-being; we have also effected significant changes in the distribution of wealth and rewards and in

the diffusion of power, which is certainly one of the goals of a free society.

In the structural changes we have effected in our economy, in public policy, and in the legal framework within which the economy operates, we have made notable progress toward the goal of stability with growth. These changes have given us renewed confidence in our ability to control our economic fate, to direct our resources toward increasing well-being, to ameliorate some of the consequences of economic fluctuations, and to prevent the disaster of major depressions.

That confidence is clearly reflected not only in the growth of our economy but also in the upward surge of population growth during the past decade. A buoyant faith in our future is characteristic of American business and of the American people generally.

The Record Shows . . .

Men of good will and social vision can never be complacent about social and economic gains lest they become blind to the needs that remain. But in our preoccupation with problems, surely it is equal blindness when we fail to see the progress already made.

Complaints are being voiced in current literature that our intellectual leaders have not only failed to inform the world of the significant transformations in our society, but that they have indeed largely failed even to recognize the existence of these transformations.

The promise of American life is an unfolding promise, and there are certainly chapters to be written on its fulfillment. The record is sufficiently clear that only those wishing evil could term our society a decadent one. Evidence is eloquent of seeds of advance, of vigor, and of dynamism.

Implicit in the language of the Preamble to the Constitution is the concept of a free society seeking peace and progress under the rule of law. That concept, rooted in the soil of our religious and philosophic heritage, lies at the core of the ethos of our society. Today every element in that concept is challenged by a tyranny which is the negation of morality.

Our nation, heir of Western civilization and symbol of the basic principles (Continued on page 54) JOW CAN SMALL BUSINESS ATTRACT EQUITY AND WORKING CAPITAL WITHOUT RESORTING TO DEFICIT FINANCING? HOW CAN IT GET RELIEF FROM ALLOCATION RESTRICTIONS; SECURE RAW MATERIALS? HERE ARE THE SALES METHODS WHICH A NEW ENGLAND MANUFACTURER IS USING TO COPE WITH THESE PROBLEMS.



LAWLOR PROPOSERSEE PROSE BLVA

DOES SMALL BUSINESS NEED

A New Concept of Salesmanship?

ROBERT WEAVER, IR.

President, Bettinger Enamel Corporation

HE position of small business to-day is simply this: It must grow or die. The one thing it can't do is stand still. For no small business can just stay where it is to-day and operate economically when everything affecting small business is changing so rapidly, and, in many cases, such as costs, materials, labor, and orders, changing so drastically.

But to grow, small business needs (1) money, (2) materials, (3) manpower, and (4) orders. The obtaining of adequate amounts of each to-day is a job that many small business men would match against the stable-sweeping chores of Hercules. And yet, insurmountable as the problems of small business may seem, their successful solutions lead to one of the biggest opportunities for progress and profit in the history of American business.

To meet the challenges of a changing economy and the present emergency, small business must learn—and put into practise immediately—a new definition of the word "sell." In the past, a small business man thought of selling in terms of a transaction between himself and his customer. He sold his product to his customer and that was that. No such simplicity exists now. Selling starts before a lathe turns, before an oil can is put to a machine.

It takes the best and strongest type of salesmanship for a small business man to get materials from his suppliers, to get money from banks and investors, to get manpower from the labor market, to get orders from customers, and to get war contracts from the government. In short, for small business,

nothing comes across the transom today. He who waits for it, just waits for the proverbial freezing over in the region below. The small business man must go out and sell himself, his product, and his company, not merely to expand, but actually to survive.

The question of capital—working capital and equity capital—is a tough one for small business to answer. But it can be answered by small business.

The small business in search of capital faces a situation such as this: There is a lot of capital looking for investments—although not as much as in "the old days." However, with personal income taxes soaring and new capital not being accumulated in large amounts, those with capital available in large sums are reluctant to invest it in speculative income-bearing ventures.

The reason is simply that if the speculation pays off, the gains will be eaten up by taxes.

Then too, many investors are reluctant to put up risk capital, even though they have a better chance for capital gains while in the meantime they receive low immediate income. So the small business man really feels the squeeze these days, when big board stocks and solid blue chip investments are yielding such unprecedented high returns. The current thinking is: Why takes chances?

What about the banks? Since it is a tough atmosphere for small business equity, the banks are often reluctant to give loans that are not severely restricted.* Then too, the Federal Reserve Board has put out a new ruling that makes it even harder for banks to loan, even if they want to. The new Federal Reserve rule has lowered the level of loanable capital, by raising the reserve

* When local banks are unwilling to take the entire risk of fonancing sulcontractors, the latter may be able to get ruaranteed Vlans from the Federal Reserve Banks. Such loans, which have no fixed limit, can be used for raw materials, wages, rent, and interest. To a limited extent they can be utilized for buying machinery and equipment. This Euroisa. requirements. This has the effect of tightening banks' loan policies.

The equity just isn't readily available to small business. There are organizations set up to develop businesses—syndicated money—but they affect so few that it hardly pays to mention them. Also, they are interested more in new inventions and developments than in the garden variety of small business.

Deficit-Financing

Not having loose equity available, a small business man may turn to deficit-financing. Instead of hunting equity capital, he borrows at fairly high interest rates. He mortgages his receivables for working capital. Then what? If he is successful, the terms of repayment are no more liberal than they were in the days when the government allowed him to accumulate money. Yet, look at the trouble he has accumulating it. What the small business man makes in profit is so heavily taxed it is difficult to accumulate money to pay off mortgages and loans.

In comparison with this picture, big

business usually isn't mortgaged heavily, nor does it have its receivables "in hock." Big business' indebtedness is long term insurance loans at very low rates of interest.

In this period, the high percentageof-profit tax laws are written with big business in mind, and they do not hurt big business too much because business has been good and the level of earnings has been high as a result of high volume. But they do hurt small business which has greater necessity for being allowed to accumulate money to pay off old mortgages. It becomes almost impossible for a small business to accumulate enough money to pay its debts. And with the excess profits tax matters even more threatening loom.

Excess profits taxes are popular to the political ear because no one wants anyone to make "excessive" profits or large war or black market profits; but to trap a few, all business has to be restricted. Such restrictions lead to inefficiencies, for business will waste money on inefficient production and costly expenses

(Continued on page 70)

WHAT SUBCONTRACTING MEANS TO THE SMALL PLANT

HOULD you seek subcontracts? How do you find out about prime contractors? What will a prime contractor want to know about your product and your plant? Here are some pointers from the Office of Small Business of the United States Department of Commerce which may help you decide whether you should enter this important phase of defense work and which tell you how to go about doing it.

FIVE FACTORS TO CONSIDER IN SUBCONTRACTING

r. Your present and anticipated volume of business. How long will your non-defense work continue in the light of approaching raw material scarcities? Do you now have or does it appear that you will have sufficient open capacity to enable you to fulfill subcontracts?

2. The item you now manufacture and the processes employed in manufacturing it. Could the item be used in its present form, as part of defense equipment? If not, would minor modifications make it usable for defense purposes? Could you turn out a different kind of item needed for defense production?

3. Your Equipment. Would it stand up, if necessary, under long hours of operating at peak capacity?

4. Tolerances. Are you and your workers accustomed to working to close tolerances? If not, do you believe that you could satisfactorily produce work of the close tolerances required for parts of defense equipment?

tolerances required for parts of defense equipment?
5. Working capital. Do you have an adequate reserve of working capital? It not, would your local bank or other source of capital be willing to advance the money to carry out subcontracts?

WAYS TO LEARN OF PRIME CONTRACTORS

If you wish to enter subcontracting the next step is to learn the names of prime contractors and the kinds of items on which they have been awarded contracts.

If you are not already familar with companies in your area producing defense items you may learn of them through your customers, suppliers, other business contacts, or local business men's association.

Likewise, you may contact the nearest regional or district office of the United States Department of Commerce or write for the name of the nearest co-operating procurement office. Each has a weekly synopsis of the awards of \$25,000 or more, listing the names and addresses of prime contractors, what the government is buying from them, and the total dollar value of the contracts made.

Information Prime Contractors Need

In approaching a prime contractor relative to obtaining a subcontract you should give him basic information about your plant. He may require the following information.

1. A description of your plant and its location.

(Continued on page 74)



THE STUNTED, GNARLED BRANCHES OF THE WEATHER-BEATEN PINE ARE TYPICAL PRODUCTS OF GARREN SOIL AND

Management and Laker Learn Together

IRVING I. PHILLIPSON

Director of Industrial Relations Botany Mills, Inc.

"JUMAN relations at the foreman's level may present serious difficulties to a company which has been recently unionized, particularly if the foremen have been selected for their technical, or forceful, attributes rather than for the quality of their leadership. The working efficiency of a plant may be gravely impaired if personnel problems are not speedily recognized and remedied.

When the raising of wages in an industry outstrips worker productivity, a heavy, and difficult responsibility is placed on management. There are price levels for manufactured goods

BSENTEEISM, WRANGLING OVER GRIEVANCES, CARELESSNESS, AND LOW MORALE MAY REDUCE APPRECIABLY THE EFFICIENCY OF ANY FACTORY, OR OFFICE. INEFFICIENCY COSTS US ALL A LOT OF MONEY. A STEEL OF THESE PROBLEMS IS OFFERED IN THE "BOTANY PLAN." HERE IS WHERE, WHY, AND HOW THE PLAN WORKS. CAN YOU USE SOME PROFITABLE IDEAS?

beyond which the public is unwilling or unable to pay, no matter what the quality or attractiveness of the products.

The problem of how to get a day's work for a day's pay was imposed on the woolen and worsted industry when it was unionized during World War II. Here is how that problem was attacked at Botany Mills, Inc. located at Passaic, New Jersey.

Botany Worsted Mills, as it was originally called, was started in 1889. The firm has operated profitably and successfully for most of its existence, except, roughly, for the period of the

(Continued on page 75)



WOOD WORTH BUILDING SINTH TALLEST IN THE WORLD-CESHING PHOTOGRAPI

Toweving aloft this Gothic edifice of commerce was for many years the largest hudding in the world. Its foundations, engineered by the young Foundation Company, were study by cassons through soft and trea-herous sand, formerly used only in bridge and dam construction.

ARS, revolutions, acts both of God and of man, all conspire together to lend adventure to the activities of any engineering contractor who wanders very far afield." Franklin Remington, who states this in the foreword to his book Braum and Brains (Bruce Humphries, Inc., 1945), has wandered very far afield indeed.

Between 1902 and 1929, when Mr. Remington retired, his company, in addition to laying the foundations upon which many of New York's skyscrapers and countless American dams and bridges rest, simultaneously carried on tremendous projects in sixteen foreign countries. Their work in Peru opened that country to world trade. On the other side of the globe, they drained the great Salonika Plain in northern Greece to provide a fertile homeland for the two million Greeks returned from Asia Minor by the defeated Turks following World War I.

Franklin Remington, who headed the Foundation Company and was its business getter—he got the business, prepared the estimates, and drew up the contracts—is the grandson of the inventor and the

HOW FIRM A FOUNDATION

Pages from the Adventures of an International Contractor

FRANKLIN REMINGTON

son of the manufacturer of the Remington rifle. But the silver spoon with which he was born melted before his business career started. An orphan by the time he graduated from Harvard, he entrusted the investment of his estate to an old family friend and set off with a classmate in search of adventure.

Expert oarsmen—both had rowed in the Varsity boat—they decided to paddle a canoe the 850 miles from Winnipeg, Manitoba, to Hudson Bay, a stunt never before attempted. They made it, in time to sign as hands on a small sailing ship, the last and only boat to leave Hudson Bay before Winter locked it in. The ship's captain, a tyrannous little Cockney, took more than their passage-price out of the boys' miserably shrunken hides before they reached London. Remington returned home to Cazenovia, N. Y., and settled down with his brother to make the farm there, which had been part of



FRANKLIN REMINGTON

their patrimony, a paying proposition.

It was hard work, physically and financially, because of killing competition from far larger Western farms. Meanwhile, the old family friend had placed all of Remington's funds with one Western investment company. This company failed suddenly and completely: young Remington took the \$3,000 which was all he had left, picked Chicago as a springboard, and jumped off.—The Editors.

PART I

MANGING tight to my little nestegg, I walked the streets of Chicago looking for work. I hadn't any practical training, hadn't the slightest idea of what I could do, or even of what I wanted to do. In later years, the friendships I made in college were to open sticky doors for me all over the world: but right then, a B.A. from Harvard was no asset in the toughest spot in America.

One day I was introduced to a man, Jenkins by name, who had been a contractor all of his business life. He had come up from the ranks and knew every detail of it. Like countless others, he had miscalculated costs on a large contract and had gone on the rocks. He had no money left.

We tied up together. I furnished

the capital—my nestegg, now shrunk to \$2,500. With the aid of a very competent foreman, a big Irishman named Walter Flemming, Jenkins and I would make up our bids. Jenkins looked after the jobs. I handled the negotiating, the purchasing and delivery of materials, and disbursed the payrolls—all the business end. To get the personal contact, I did our banking in a small private bank, got on very friendly terms with our banker, told him every detail of our business, and always paid our bills promptly. This was to stand me in good stead.

At first, our limited capital permitted us to take only small sub-contracts from bigger contractors. We built sidewalks, sewers, laid water pipes. But we made money. Gradually, the size and importance of our jobs increased until we were out of the sub-contractor class. One day Jenkins came in with an advertisement in one of the engineering journals. "Can you beat it?" he said. "Read this."

Dilemma Proposed

It was an extraordinary ad. The city of Hammond, Ind. announced that it had come to the end of its legal borrowing capacity and had no money for more improvements. But the city wished to build an intake extending out a mile into Lake Michigan, a big pumping station on the shore, and a six-mile length of 18-inch cast iron pipe to connect with the distributing system of the city. This was a formidable undertaking, requiring much more capital than we had, and the highest kind of engineering skill.

The ad said the contractor would have to furnish all the money required to do the work and a financial scheme for repayment; and added frankly that the city authorities, under the law, saw no way of repaying him.

"Frank," said Jenkins, "there won't be a bidder on that job. Can't you figure some way we can get around that law limiting their borrowing capacity to 3 per cent of their assessed valuation?"

I knew Tom Griffen, the best lawyer in Indiana, intimately. He had been Attorney General of the State, and had recently opened an office in Chicago. I got over there with the ad in my hand.



LOUVAIN LIBRARY, BELGIUM-COURTESY N. Y. PUBLIC LIBRARY

ABOVE Razed by invading Teutonic hordes in 1914, the world-famed library was reconstructed in 1921 by American generosity and skill.

BELOW In 1928 the late King Albert of Belgium awarded this medal to the author for his part in the rebuilding of the Louvain Labrary.



ORDER OF THE CROWN OF BELGIUM-UNDERHILL PROTOGRAPH

"If there is one man in the world who can get around that 3 per cent law." I told him, "you're the man. Will you think it over?"

Sure enough, in a couple of weeks he had a plan. It was a marvel of simplicity and later became the standard practise in Indiana for cities which had bonded themselves to their legal limit. His idea was, that I must form a water works company of which I would own all the stock. My water works company would make a contract with the city of Hammond to build a water works system according to plans and specifications of the city engineer for a lump sum figure to be

paid me yearly in 20 annual installments. The city could not legally issue and sell bonds to raise the money to pay me, but it could legally pay my company a hydrant rental as part of their yearly budget of expenses.

This hydrant rental would be fixed at a sum sufficient to pay the amount of my contract figured over a period of 20 years. When this hydrant rental contract was signed by the city, the water works company then would issue its 20-year bonds to the amount of the contract price plus interest and amortization. The security for the payment of these bonds would be the yearly hydrant rental. All I had to do was find a banker who would buy these bonds, which would enable me to get paid in cash for my work.

Dilemma Deposed

I went straight to my banker and told him the story. He knew Tom Griffen by reputation, and when I produced his written opinion as to the legality of the plan and the bonds, he called in his lawyers. For a week, while they deliberated, no bridegroom was in a more continuous state of suppressed excitement than I was. Finally the banker called me in and told me his lawyers had approved the legality of the bonds. There was no dickering. He offered me 95 for the bonds for any amount up to a million dollars. I accepted and left his office in a daze.

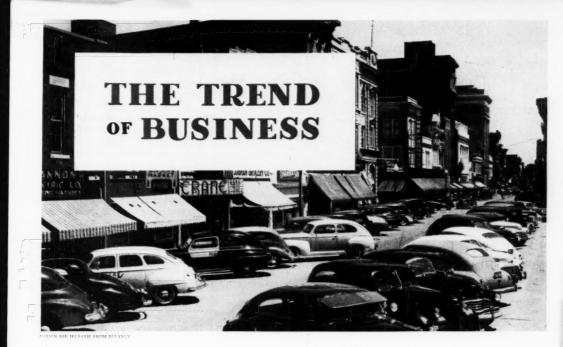
We were over the first hurdle. But neither Jenkins nor I was able to make up a bid on such a highly technical engineering job as this. I sent to the consulting engineer of the city of Hammond, a very fine old man, and asked if he knew of an engineer who could help me make up my bid.

"Why," said he, "I know just the man, Frank Smith. He has recently finished a job very similar to this, and I'll give you a letter to him."

Smith was willing to gamble his time making up our bid. If we won out, he was to come with us, act as our chief engineer on a salary and a share in the profits. He proved to be an extraordinarily able man of the highest character, and we were to work together on many other important contracts.

We all three, Jenkins, Smith, and (Continued on page 64)

SEPTEMBER



PRODUCTION

PRICES . . TRADE . . FAILURES

Business streets were thronged as early Fall shoppers responded to seasonal promotions. Retail volume and retailers' orders elimbed, but manufacturers of civilian goods became increasingly pinched by Government limitations on output for nonmilitary use and growing raw materials shortages. Defense expenditures mounted further.

MCHIEVEMENT of a mid-path between continued high standards of living for consumers and a strong program of military preparedness was the major problem besetting the nation's economy in August.

Expenditures for the Army, Navy, and Air Force had reached the highest level since World War II. Reaching an annual rate of \$33 billion by the end of August, they were moderately above the July level and more than two and one-half times the spending level of a year ago.

In the same month an increased volume of both military equipment and civilian merchandise was funnelled forth from the nation's factories bringing the Federal Reserve Board's index of industrial production somewhat above the July level. In that month it had registered 215 per cent of the 1935-



From FRB data with 1949 annual averages as base.

1939 average, 10 per cent above that of July 1950.

The chief headache of manufacturers since the inception of the country's stepped-up defense effort nine months ago had been the shortage of machine tools. In August a lag of as much as two years was reported in deliveries of critical tools to airplane engine plants, tank factories, and other key defense industries.

The crux of the problem was that before more machine tools could be built,
new tools would have to be built for
the machine tool industry itself. This
situation was partially alleviated early
in August when the National Production Authority gave machine tool
makers first call on needed tools, to be
diverted if necessary from industries
engaged directly in military production.
Despite the growing order backlogs,
however, output was more than double
the production level of a year ago.

As seen by the above chart, iron and steel production and machinery output have neared their peaks under present capacity levels, while the output of nonferrous metals has shown a marked decline since the beginning of the year.

Weekly Signposts of Activity

WEEKLY 1939	Averages 1950	SELECTED BUSINESS INDICATORS	LATEST WEEK	PREVIOUS WEEK	YEAR Ago	WEEK ENDED
102	186	Steel Ingot Production Ten Thousand Tons	200	201	187	Aug. 27
76	98	Bituminous Coal Mined	108	103	109	Aug. 25
69	154	Automobile Production Thousand, cars and trucks	132	123	170	Aug. 25
31	62	Electric Power Output Hundred Million kwh	71	72	63	Aug. 25
65	75	Freight Carloadings Ten Thousand Cars	84	83	84	Aug. 25
109	304	Department Store Sales	279	268	288	Aug. 25
77	161	Wholesale Prices	177	177	167	Aug. 21
74	237	Bank Debits Hundred Million Dollars	240	244	258	Aug. 22
76	272	Money in Circulation Hundred Million Dollars	279	260	270	Aug. 22
219	176	Business Failures	130	158	176	Aug. 23

Sources: Amer. Iron & Steel Inst.; U. S. Bureau of Mines; Automotive News; Edison Electric Inst.; Amer. Assoc. of Railroads; Federal Reserve Board; U. S. Bureau of Labor Statistics; Dun & Bradstreet, Inc.

This decline has complicated the problem of allocations under the Controlled Materials Plan.

An idea of the complexity of CMP's

An idea of the complexity of CMP's task may be had from the fact that over-all fourth-quarter demand for copper and copper-base alloys will amount to 170 per cent of estimated supply, while aluminum needed for the same period will approximate 145 per cent of available supply. In the case of carbon steel, demand was estimated at 147 per cent of supply, while that for structural steel was 223 per cent of the amount available in the fourth quarter. Allotments for the three-month period will include 1.32 billion pounds of copper, 682 million pounds of aluminum and 24 million tons of steel.

Some key production figures in August continued to be above their 1950 comparatives. Steel ingot output averaged 8 per cent above last year's level, crude oil output was up 10 per cent, electric power production up 12 per cent. On the downward side were bituminous coal output, down 5 per cent; lumber, down 6 per cent; and automobiles, down 35 per cent. Contract awards for civil engineering construction were down 8 per cent.

Soaring to an unprecedented 62.5 million persons in July, total civilian employment constituted 97.1 per cent of the available labor supply. This compared with 96.8 per cent in the pre-

| 1945 | 1949 | 1950 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 | 1951 |

Industrial Production

December 192 179 218

1 Approximation: figure from unseed source not available.

Consumers' Price Index

	1948	1949	1950	1951
lanuary	108.5	170.9	166.9	181.6
Lebruary	167.5	169.0	166.5	184.2
March	100.0	efea.s	167.0	184.5
April	169.4	109.7	167.3	1845
May	150.6	169.2	168.6	105.4
lune	-	16miles		185.5
fuly	73.7	168.5	1725	185.60
August	174.5	168.8	874.0	
September	174.5	169.6	174.8	
Oktober	174.6	168.5	174.8	
November	172-2	168.6	179.6	
December	170.0	of the second	108 1	

f Approximation; figure from quoted source not available,

Wholesale Commodity Prices

	Index 1986=100	U. S. Barren of	Labor Statistics	
	1945	1949	1950	1951
famuary	169.9	160.7	151.5	150.1
February	161.0	158.4	152.7	1836
March	161.6	158.6	152.7	154.0
April	164.0	157.1	152.9	1846
May	1544	155.8	155.0	
lune		154.5	152	181.7
Iuly	168.8	1616	12.14	179.1
August	16q.8	151.9	166.4	
September	168.9	154.5	169.5	
October	1654	152.2	169.1	
November	164.0	151.6	171.6	
December	162 1	161.5	174.2	

Employment

1 Approximation from more Laurest not smildle

Industrial Stock Prices

	Monthly Arero	ge of sharry smarr	close fones	
	1948	1949	1950	1956
lanuary	170.20	179.75	199.79	244.45
February	168.47	174.46	2012.4%	251.32
March	169.94	175.87	200.30	249.50
April	180.05	175.65	212.57	253.36
May	186.48	174.03	219.36	254.36
lune	191.05	155.59	221.02	249.42
fuly	187.05	178-84	205, 30	2.60
August	181.77	179.24	216.60	
September	480.42	180.93	NI	
October	185.19	186.47	22,912	
November	-	191.61	229.18	
Decomber	176.11	- 1	2202.26	

Based on closing prices of to industrial stocks

ontidy Arrange of Daily Index. Don Jones

Hased on closs	ng prices of to	industrial stock	\$.	
	Re	tail Sales		
	Mistr of Dollars	U.S. Department	of Commerce	
	1945	1949	1050	tost
lamouty	9.7	9.3	9.9	*13.3
February	8.9	8.0	9.3	13.1
March	10.8	1:0.5	11.5	12.1
April	10.7	11.1	21.7	12.0
May	10.5	ro.8	41.7	12.1
Tune	10.0	20.8	12.0	11.9
Iuly	10.8	10.2	124	11.5
Acceptant	1 8	106 4	V	

WHOLESALE FOOD PRICE INDEX

The index is the sum total of the prices per pound of 31 foods in general use. It is not a cost-of-living index

Latest Weeks	Year Ago	1951
Aug. 21\$6.93 Aug. 14 6.94	Aug. 22\$6.56 Aug. 15 6.53	High Feb. 20. \$7.31 Low July 17. 6.88
Aug. 7, 6,95 luly 31 6,91 luly 24 6,90	Aug. 8. 6.53 Aug. 1. 6.53 July 25. 6.40	High Dec. 26. \$6.90 Low Jan. 3. 5.73

BUILDING PERMIT VALUES-215 CITIES

Geographical		dv		9%
Divisions:	1951	1950		
New England Middle Atlantic South Atlantic Last Central South Central West Central Mountain Pacific	524,245,614 77,700,220 64,846,220 80,544,082 57,522,360 24,420,424 11,450,748 69,592,224	\$41,062,528 87,269,536 44,149,420 818,601,739 99,571,771 47,404,859 83,655,430	11111	11.0 47.0 51.8 42.2 48.5
Total U. S New York City	\$415,671,892 \$45,557,765	\$524,978,208 \$57,123,541		

Outside N. Y. C.... \$370,014,127 \$487,852,667 - 24.2

PRICES

vious month and with 95 per cent utilization of the labor force a year earlier. Most of the increase in July's employment occurred in defense and defense supporting industries where shortages of such skilled workers as draftsmen, machinists, and tool and die makers persisted.

Declines in employment occurred largely in civilian durable goods industries which, because of cut-backs in civilian goods production and raw materials shortages, have found it necessary to reduce operations until defense contracts could be obtained.

A seasonal dip in the number of farm workers was an added factor in preventing the total employment from reaching a higher level than it did. A drop of about 127 thousand persons from agricultural employment partly offset a rise of 850 thousand persons in nonagricultural jobs. Unemployment declined 6 per cent to 1.9 million persons in July.

Prices and Mages The downdrift of spot commodity prices continued in the first two weeks of August. The weekly Wholesale Commodity Price Index of the Bureau of Labor Statistics reached 177.4 per cent of its 1926 average in the week ended August 14. This was the lowest depth it had plumbed since the first week of January. It was still 7 per cent above its corresponding year-ago level, however.

Daily Wholesale Price Index

The index is prepared on the basis of daily spot closing prices of 30 primary commodities (1930-1932=100).

Week Ended	Mon	Tues.	Wed.	Thur.	Fri.
Aug. 25	\$00.00	290.79	299:59	209.78	200.40
Aug. 18	300.65	\$00.79	301.30	801.09	801.08
Aug. 11	300,60	300.80	\$01.20	301.22	301.02
Ang. a	301.48	\$02.09	302.00	\$01.07	302.42
July 28	302.23	302.76	302.53	301.51	302.38

New Business Incorporations

Geographical	lune	lune	Six !	Months
Regions	1951	1950	1951	1950
New England	473	576	2,868	3.317
Middle Atlantic	2.345	3.041	15,609	18,400
East North Central	1.179	1.405	7,512	8,579
West North Central	5.40	454	2.195	2,632
South Atlantic	978	1.256	6,313	7,088
East South Central	201	294	1,220	1,676
West South Central	368	610	2,601	3,611
Mountain	253	365	1,812	1,980
Pacific	668	860	4,622	5.146
		-	-	
Total U. S	6,810	8,861	44.261	52,438

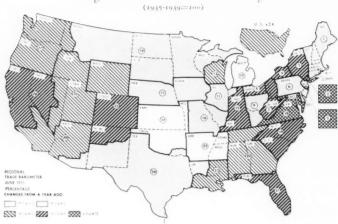
Compass Points_

	Year	Mar.	Apr.	May	June	July
	1949	57.6	57.8	58.7	59.6	59.7
Employment, Civilian	1950	57.6	58.7	59.7	61.5	61.2
Million persons	1951	60.2	60.0	61.2	61.8	62.5
	1949	3.2	3.0	3.3	3.8	4.1
Unemployment Million persons	1950	4.1	3.5	3.1	3.4	3.2
Million persons	1951	2.1	1.7	1.6	2.0	1.9
Farm Income	1949	2.0	1.9	1.9	2.1	2.2
Billion dollars	1950	1.7	1.6	1.8	1.9	2.4
	1951	2.1	2.1	2.2	2.2	2.6
Consumers' Credit Outstanding	1949	13.5	13.8	14.0	14.3	14.4
Billion dollars	1950	16.3	16.6	17.1	17.7 19.2	18.3
	1951	19.4	19.1	19.2	19.2	
Gross Hourly Earnings of Industrial	1949	1.40	1.40	1.40	1.41	1.41
Workers Dollars	1950	1.42	1.43	1.44	1.45	1.46
WOLKES LOUIS	1951	1.57	1.58	1.59	1.60	1.60
Weekly Earnings of Industrial	1949	54.74	53.80	54.08	54.51	54.63
Workers Dollars	1950	56.53	56.93	57.54 64.55	58.85	64.56
	1951	64.57	64.74		65.44	
Manufacturers' Sales*	1949	17.4	16.6 17.2	16.5 19.3	16.8 19.8	16.0
Billion dollars	1950 1951	17.8 23.4	22.4	23.1	22.4	20.7
	1949	32.4	32.2	31.7	31.2	30.4
Manufacturers' Inventories*	1950	29.1	29.4	29.7	29.9	29.7
Billion dollars	1951	36.4	37.8	38.9	39.6	-20
	1949	7.9	7.4	7.5	7.7	7.2
Wholesalers' Sales*	1950	7.7	7.4	8.0	8.4	9.0
Billion dollars	1951	9.5	9.1	9.5	8.7	
	1949	9.3	9.4	9.2	9.0	9.1
Wholesalers' Inventories*	1950	9.2	9.4	9.5	9.5	9.3
Billion dollars	1951	11.4	11.7	12.0	13.2	
	1949	10.7	10.8	10.8	10.7	10.5
Retailers' Sales* Billion dollars	1950	11.1	11.1	11.3	11.7	12.7
Billion dollars	1951	12.3	12.0	12.1	11.9	11.8
Retailers' Inventories*	1949	14.7	14.5	14.1	14.2	13.9
Billion dollars	1950	14.3	14.1	14.4	14.7	14.1
Lancia Bernary	1951	18.6	19.0	19.1	18.7	
	1949	184	179	174	169	161
Physical Production Index* 1935-1939=100	1950	187	190	195	199	196
1933-1939=100	1951	223	223	223	222	215
2 : 1 : 0 1 : 1	1949	3.3	3.1	3.1	3.6	2.8
Freight Carloadings Millions of cars	1950	3.4	2.9	3.0	3.9	3.0
Millions of Cars	1951	3.8	3.2	3.2	4.0	3.0
Building Permits, 120 Cities	1949	256	283	257	317	241
Million do'lars	1950	357	355	464	462	418
annoa do tars	1951	350	290	349	299	333
Commercial and Industrial Failures	1949	847	877	775	828	719
Number	1950	884	806	874	725	694
- Trumotr	1951	732	693	755	699	665
Liabilities of Failures	1949	37.2	31.9	24.6	28.2	21.8
Million dollars	1950	27.9	21.3	22.7	18.1	19.5
	1951	17.7	17.1	23.5	22.8	21.1

* Adjusted for seasonal changes.

These figures bring up to date some of the series in "The Compass Points of Business" quarterly supplement to the May Dun's Review. The next quarterly supplement will appear in August.

Regional Trade Activity



		-% Change	e from-			~% Chang	e trot
REGION	lune 1951	June 1950	May 1951	REGION:	June 1951	June 1950	N1
5. Northern New Jersey 6. Philadelphia 7. Pittsburgh 8. Cleveland 9. Cincinnati and Columbus. 10. Indianapolis and Louisville 11. Chicago	336.6 242.4 291.2 320.7 305.9 260.5 293.6 301.6	+ 2.4 + 0.7 +13.0 + 8.8 + 8.0 +10.0 - 1.6 + 0.0 + 7.4 + 0.0 + 5.1 - 0.0	+ 0.2 - 5.5 + 9.1 + 5.8 - 1.2 - 1.0 + 4.9 + 1.5 + 0.6 - 0.2	15, Iewa and Nebraska. 16 St. Louis. 17 Kattsas City. 18 Maryland and Virginia. 16, North and South Carolina. 20. Atlanta and Birmingham. 21. Florida. 22. New Orleans. 23. New Orleans. 24. Texts. 25. Salt Lake City. 27. Portland and Seattle.	324.1 297.8 348.3 325.0 436.4 456.1 424.4 377.0 389.3 433.7 327.8 343.7	- 1.5 - 3.5 - 3.6 + 10.2 + 2.0 + 8.3 - 5.3 + 3.6 + 7.8 + 2.4 + 3.8	+ +++++ ++
	353.8	+ 1.0 - 0.5	- 3.8 -10.5	28. San Francisco		+ 6.3	#

Meanwhile the Dun & Bradstreet Weekly Wholesale Food Price Index rose slightly from the mid-July level but dipped again by mid-August. On August 21 it registered \$6.93, the same amount as that recorded for January 2. The percentage increase over its comparable 1950 level had narrowed to 5.6 per cent. The index represents the sum total of the wholesale price per pound of 31 foods in general use.

The average weekly wages of factory workers increased slightly at mid-Summer to reach an all-time peak of \$65.44 in June, or 11 per cent above the pre-Korean level of June 1950. Average gross hourly earnings amounted to \$1.60 for a work-week of 40.8 hours.

Total personal income also reached a record level. At a seasonally adjusted annual rate of \$251 billion in June, it represented a 15 per cent rise from 1950. The estimate includes proprietorship income, dividends, interest, and rent as well as wages and salaries.

For the first time in six months total business inventories declined from the level of the preceding month. By July over-all supplies on hand had dropped to a value of \$69.3 billion or about \$300 million below that of the previous month, despite a measurable rise in the value of manufacturers' stocks.

While the finished products of most civilian goods producers were piling up on their shelves at mid-Summer, wholesalers and retailers were curtailing orders and paring stocks to conform to the previous slackening of their own sales.

In the latter part of August, however, business at both wholesale and retail levels began to revive. Back-toschool and other Fall promotions sparked renewed interest in children's wear and women's coats and suits. Relaxation of Regulation W early in the month boosted the shopper appeal of previously languishing refrigerators, television sets, and other consumer durables. Retailers increased their replacement orders to suppliers.

The Dux's Review Regional Trade Barometer, which measures consumer spending in terms of the 1935-1939 average, rose 5 per cent in July after adjustment for seasonal change and the number of business days in the month. At 353-7 (preliminary) it was 4 per cent below the 1950 level.

Finance
August stock prices averaged well above levels reached in July, while the volume of shares in transaction remained close to that of the preceding month. The Dow-Jones average of 30 industrial stocks reached the highest peak since the late Spring of 1930, but was still considerably below the all-time high of 381.17 attained in September 1929.

The July average of 253,60 was 24 per cent above the level of a year ago. Although the 30 stocks comprising the Dow-Jones industrial index were relatively strong in July and August, many industrial stocks not represented by

(Continued on page 28)

BANK CLEARINGS (Thousands of Dollars)

	- luly-		%
	tost	1950	Change
Boston	2,219,598	1.964.850	+13.0
Philadelphia	4,200,000	4,409,000	4. 7.8
Buffale	432,477	870,078	+11.0
Pittsburgh	1.480,258	1.855,810	+ 9.2
Cleveland	1.795.306	1,448,662	+24.4
Cincinnati	898,663	840,550	+ 6.0
Baltimore	1,150,713	1,011,468	-13.8
Richmond	503,035	542,296	+00.2
Atlanta	1,192,583	985,600	+20.0
New Orleans	589,599	559.765	+ 9.2
Memphis	383,553	371.321	+ 5.3
Chicago	3,620,713	3,329,414	+ 8.7
Letroit	2,199,840	1,928,803	4-14.1
Sc. Louis	1.307.474	E.250.181	+ 10
Louisville	596,285	558,174	+ 6.8
Minneapolis	1,234,075	1,157,557	+ 6.6
Konsas City	1,287,421	1.489.354	-63.6
Omaha	608,776	567.342	+ 7.3
Denver	546.739	488,259	-12.0
Dallas	1,238,089	1,228,387	+ 0.8
Houston	1,088,231	1,002,795	+ 8.5
San Francisco	2.160,048	1,797,662	+20.2
Portland, Orc	635,510	735,653	-13.6
Seattle	651,003	585,002	+11.7
Total 24 Cities	32,320,807	29.659.776	+ 9.0
New York	\$2.182.150	30.534.802	+12.0
Total 25 Cities	66,504,446	60,194,578	+10.5
Average Daily	2,660,178	2.407.783	+10.5

Why Do Businesses Fail?

GRIFFITH M. JONES

Assistant to the President Dun & Bradstreet, Inc.

HE EARLY years in the life of a business are critical. The majority of recent failures have been businesses that have been in operation for five years or less.

It is interesting to compare the age distribution of failures with the causes of failure. Inexperience, the token of youth, ranks high among the classification of causes. This is another in the series based on a continuing survey of the reasons for business failures.

FAILURES BY AGE OF BUSINESS 1945-1950

Age		-Percen	TAGE OF	ALL F	AILURES-	
IN YEARS	1945	1946	1947	1948	1949	1950
One or less	8.0	9.3	5.0	4.8	4.5	4.2
Two	23.9	26.8	23.6	23.3	19.7	18.2
Three	13.6	18.9	22.4	27.0	20.1	17-5
Four	6.7	10.4	10.6	13.9	19.3	14.4
Five	6.9	6.4	6.0	7.5	0.11	13.0
Six	6.2	6.2	4.6	3-4	5.2	8.5
Seven	5.1	3.9	3.5	2.4	3.1	4-3
Eight	4-7	1.3	2.0	2.5	2.2	2.6
Nine	2.1	1.8	1.7	2.4	2.1	1.8
Ten	1.7	0.7	1.5	1.8	1.9	1.8
Over Ten	21.1	14.3	9.1	0.11	10.9	12.8
Number of Failures	809	1,129	3,474	5,250	9.246	9,162

Classification of Causes of BUSINESS FAILURES-Year Ended June 30, 1951

Based on Opinions of Informed Creditors and Information in Dun & Bradstreet's Credit Reports

		PER	CENT-								PER CI	ENT-		
MANU			CON	- CON	1-				MANU-			CON-	CONIMER	-
FAC- TURIN			STRU-			UNDERLYING	CAUSES	APPARENT CAUSES	I ACTUR-	WHOLE- SALE	RETAIL	STRUC	SERVICE	TOTAL
								Bad Habits	1.0	1.0	2.0	1.3	0.4	1.5
2.0	6.3	6.7	5.3	3.6	5.7	Neglect:	Due to	Poor Health	1.8	3.3	3.0	2.4	1.7	2.6
3.9	0.5	0.7	2.5	5.0	2.1	venteer.	estile etc	Marital Difficulties	0.4	0.6	0.7	0.7	0.9	0.7
								Other	0.7	1.4	1.0	0.9	0.6	0.9
								Misleading Name	o.t		0.1		0.1	0.1
								False Financial Statement	0.2	0.9	0.6	0.6	0.9	0.6
3.5	6.0	3.1	3.0	5.5	3.7	FRAUD:	On the part of the principals,	Premediated Overbuy Irregular Disposal of As-	0.5	1.1	0.3	0.1	0.3	0.4
							reflected by	sets	2.4	3.2	1.8	2.1	3.8	2.4
								Other	0.3	0.8	0.3	0.2	0.4	0.3
		18.6				Lack of Experience	1	Inadequate Sales Heavy Operating Ex-	53.8	45.6	47.0	27.2	41.6	45-5
12.5	10.4	10.0	9.5	11.4	14.9	IN THE LINE	Evidenced by	penses	8.2	5.0	6.2	1.2.2	13.1	8.0
11.6	12.7	16.7	17.0	15.2	15.3	LACK OF MANAGERIAL		Receivables Difficulties	11.1	19.3	5.1	17.0	7-4	9-3
11,0	12.7	10.7	17.9	13.2	15-5	EXPERIENCE	avoid condi-	Inventory Difficulties	10.2	13.1	12.1	2.7	1.6	9.9
13.4	14.6	12.1	18.4	14.5	13.4	UNBALANCED EXPERI-	tions which re-	Excessive Fixed Assets	17.0	5.1	13.1	1.2	17.2	12.1
+ 3-4	. 3.0		10.4	14.3	13.4	FNCE*	sulted in	Poor Location	1.0	1.6	7.0	1.4	3.0	4.7
51.5	48.3	39.6	40.8	42.8	43.2	INCOMPETENCE		Competitive Weakness	12.3	12.2	14.3	23.2	10.8	14.3
23	43		4	4	43.0		Some of these	Other	6.4	5.5	3.7	11.4	5.7	5.4
							occurrences	(Fire	1.2	0.7	0.7	0.2	0.7	0.7
							could have	Flood			0.1		0.1	0.1
2.1	1.0		0.7	2.5	1.6	Disaster:	been provid-	Burglary	0.2	0.1	0.2		0.3	0.2
2.1	1.9	1.4	0.7	4.5	1.0	DISASTER.	ed against	Employees' Fraud	0.1	0.3	0.1	0.1	0.5	0.1
							through insur-	Strike	0.2		0.1	0.2	0.4	0.1
							ance	Other	0.4	0.8	0.2	0.2	0.7	0.4
								Because some tailores are at	tributed to	a combin	ation			
1.5	0.8	1.8	2 4-4	4.5	2.2	REASON UNKNOWN		of apparent causes, the total						
100.0	100.0	100.0	100.0	100.0	100.0	Total.		the totals of the correspond	ing comm	ins on the	tejz.			
								PER CENT OF TOTAL FAIL-						
1,644	877	4,259	957	704	8,451	NUMBER OF FAILURES		URES	19.5	10.4	50.5	11.3	8.3	0.091
						ESTIMATED NUMBER		PER CENT OF TOTAL LIST-						
262,016	204,070	1,483,920	3	3	2,519,388	OF LISTED NAMESS		ED NAMESS	10.4	8.1	58.9	3	3	0.001
C	S	\$21.000	\$11.06	\$20.166	e e . e .	CUR. LIABS, IN THOU-		PER CENT OF TOTAL CUR-						
274,209	331,135	371,014	\$31,900	320,100	\$228,484	AVERAGE LIABS, PER		FAILURE RATE FOR EACH	32.5	13.6	31.1	14.0	8.8	100,0
£ 12 1 200	S . c . c . c . c	\$16.610	822 206	\$186.0	\$27,036	FAILURE		GROUP †	62.7	120	28.8	8	8	
442:130	433,302	210,053	433,390	200,043	2=1,030	AMLUNE	1	GROUP T	02.7	43.0	20.0	3		32.1

^{*} Experience not well rounded in sales, finance, purchasing and production on the part of an individual in case of a proprietorship, or of two or more partners or officers constituting a management unit.

Annual rate of failures per 10,000 listed names.

The number of names in each group is an estimate, but
the total number of names was obtained by an octual count

Book at the end of two. The names in the Reference Book include only a limited percentage of the total service and construction exceptions; therefore, estimates of the number of names and hallow their for their we introd



- Under its former name, LYON-Raymond Corporation linked 80 years of successfully manufacturing quality products through three generations of the LYON family with 30 years of manufacturing material handling equipment under the RAYMOND family management.
- Because the name LYON had no connection with present company management and caused confusion with similarly-named manufacturers, it was decided to shorten the name. It is expected that this new name The RAYMOND Corporation will better identify RAYMOND family management now and in the years to come.
- The company in the past has built up a reputation for quality products and for pioneering in numerous types of Hydraulic Elevating Equipment. During the last several years, we have brought forth a notable number of "firsts".
- Today, under our new name The RAYMOND Corporation we will continue to help keep materials moving in factories, in warehouses, in every field where electric trucks and hydraulic elevating equipment can be applied. And, while our name is changed, RAYMOND policies, services and quality of products will continue on the high standards already established.



Formerly LYON-Raymond Corporation

Electric Industrial Trucks • Hydraulic Elevating Equipment
The RAYMOND CORPORATION

4654 SpaceMaker Street, Greene, N.Y.

the index were lower than they were in late Winter.

Trading volume on the New York Stock Exchange in July, totalling nearly 28 million shares, was slightly larger than a month earlier, but below the July 1950 level. At that time volume reached 44.5 million shares reflecting sizable liquidations and transfers to war stocks which were touched off by Korean hostilities.

Most of the demand this year came from investment trusts, institutional buyers, and professional speculators with the most favored stocks being steels, motors, and machinery. Bond dealings in July increased over those of a month before, but were more limited than in any July since 1014.

Failures Declining moderately for the second consecutive month, business failures were down 5 per cent in July to 665. They dipped slightly below the 1950 and 1949 levels of 694 and 719 respectively, but exceeded the July levels of all other years since 1942. There were about one-half as many failures, however, as in the prewar years of 1939 and 1940.

Dun's Failure Index, which extends

FAILURES BY DIVISIONS OF INDUSTRY

(Current liabilities in thousands of dollars)		mber -luly-	Liabilities		
MINING, MANUFACTURING	860	1.311	40,673	62,302	
Mining-Coal, Oil, Misc	120	16	1,020	2.038	
Food and Kindred Products	126	156	7.582	0.283	
Textile Products, Apparel	211	260	8,420	9.580	
Lumber, Lumber Products	125	201	5.004	7,005	
Paper, Printing, Publishing.	45	73	1.893	4.351	
Chemicals, Allied Products.	27	31	937	4.271	
Leather, Leather Products	30	6a	1,431	1,000	
Stone, Clay, Glass Products.	2.2	37	504	1,697	
Iron, Steel, and Products	24	50	541	3.815	
Machinery	64	141	7.593	7.197	
Transportation Equipment.,	8	39	153	3.157	
Miscellaneous	152	234	4,576	8,007	
WHOLESALE TRADE	522	668	23,245	23,888	
Food and Farm Products	156	100	5.460	8,162	
Apparel	22	28	556	934	
Dry Goods	15	1.4	318	398	
Lumber, Bldg. Mats., Hdwr.	40	72	1,532	3.545	
Chemicals and Drugs	22	2.4	585	597	
Motor Vehicles, Equipment.	19	43	300	1,084	
Miscellaneous	248	310	14,485	9,168	
RETAIL TRADE	2,578	2.734	45,684	47.834	
Food and Liquor	670	547	8,936	6,160	
General Merchandise	94	142	2,002	2.811	
Apparel and Accessories	\$95	465	5,605	8,718	
Furniture, Furnishings	255	289	8,930	6,261	
Lumber, Bldg. Mats., Hdwr.	151	170	2,615	3,611	
Automotive Group	178	267	2,666	4.470	
Eating, Drinking Places	525	493	10,523	9,263	
Drug Stores	58	69	991	1,058	
Miscellaneous	245	292	3,407	4.482	
CONSTRUCTION	560	506	20,587	13,231	
General Bldg. Contractors	196	159	9.434	5,120	
Building Sub-contractors	344	323	8,714	7,091	
Other Contractors	20	24	2,439	1.020	
COMMERCIAL SERVICE	405	439	9,586	10,770	
Air and Highway Transp	123	105	4,647	3,210	
Misc. Public Services	18	22	500	726	
Hotels	10	10	389	1,576	
Cleaning, Dyeing, Repairs.	56	57	789	660	
Laundries	29	2.4	732	583	
Undertakers	5		100	101	
Other Personal Services	36	36	477	450	
Business Remain Service	128	1 Cu 2	1 050	9 200	

the monthly failure rate to an annual basis and adjusts for seasonal fluctuations, rose slightly in July from the June level to 33 per 10,000 listed enterprises. This was the largest insolvency rate so far in 1951. With the exception of July 1949, it was the highest July rate in ten years.

Current liabilities involved in the month's casualties fell 7 per cent to \$21.1 million. Failures in all liability size groups declined from the month before except in the \$25,000 to \$100,000 category which remained unchanged. Current liabilities amounted to more than those of last year due to increases in the number of casualties involving less than \$5,000 and those involving more than \$100,000. Declines from 1950's level prevailed in the two medium-sized liability categories. Larger liabilities were involved than in any other July since 1935 with the exception of 1949.

Of the businesses failing in July, 64 per cent were less than five years in existence. Businesses which commenced operations in 1950 or later accounted for 20 per cent of July's failure total.

The July decline in failures resulted

THE FAILURE RECORD

	July	June		P.C.
DUN'S FAILURE INDEX®	1951	1951	2950	
Unadjusted	30.7	31.2	31.2	2
Adjusted, seasonally				
Adjusted, seasonany	33.0	31.5	33-5	
NUMBER OF PAILURES	665	699	694	- 4
NUMBER BY SIZE OF DEST				
UNDER \$5,000	150	162	1.40	4 -
\$5,000-\$25,000	347	350	363	- 4
\$25,000-\$100,000	114		150	16
\$100,000 and over	34		32	+ 0
NUMBER BY INDUSTRY G	ROUPS			
Manufacturing	130	8.20	151	
Wholesale Trade	66	66		
Retail Trade	740	300	213	
Construction	74		65	+1:
Commercial Service	55	43	62	-11
	(Liabi	lines in	thousan	eds)
CURRENT	\$21.088	522,773	519.548	+ 8
TOTAL		\$23,143		

 Apparent annual failures per 10,000 listed enterprises, formerly called Dun's INSOLVENCY INDEX.
 Per cent change of July 1951 from July 1950.

Business Failures are industrial and commercial enterprises which have discontinued operations with a residiant loss to creditors, bissinesses involved in court actions such as receivership, reorganization, or arrangement which may or may not lead to discontinuances, and businesses reaching voluntary compromises with creditors which become a matter of public record.

CURBENT LIMBLETTES, as used in the Failure Record, have a special meaning: they include all accounts and notes payable and all obligations; whether in secured form or not, known to be held by banks, officers, affiliated companies, supplying companies, or the Government. They do not include long-term, publicly-field obligations. Off-setting assets are not taken into account.

largely from retail organizations whose liquidations fell to 340 from the previous month's total of 390. The drop was evident in all lines except furniture which rose to the highest level since January. Food stores, eating and drinking establishments, and general merchandise stores reported the most marked declines in the month.

Manufacturing and wholesaling groups sustained the same number of casualties as they did a month earlier. The largest toll among manufacturers occurred in the textile and apparel groups. Approximately one-third of all wholesalers' failures were concentrated among food distributors.

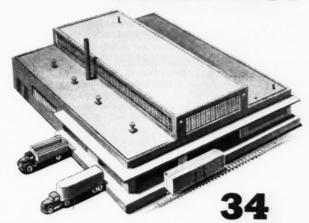
The month's sole increases were in construction, both general builders and subcontractors, and commercial service, largely in transportation.

Compared with a year ago, manufacturing, wholesaling, and service failures were down to to 14 per cent. Almost no year-to-year change occurred in the retailing group, increases in food failures largely offsetting declines in the automotive, apparel, and general merchandise trades. Construction was the one major group for which an over-all increase in failures was reported, a rise of 14 per cent.

Geographically, all regions other than the East North Central and Mountain States reported decreased failures. The two exceptions sustained moderate failure increases from the previous month, Most of the monthly declines were relatively small except for a noticeable 33 per cent drop in the South Atlantic States. In this region declines were most evident in Virginia, West Virginia, and Florida. Casualties in the Middle Atlantic States were mostly down except for a slight increase to 104 from 101 in New York State.

Bucking the tide of an over-all year-to-year drop of 4 per cent, four regions (New England, Middle Atlantic, West South Central, and Pacific States) reported an increased number of failures. Most noteworthy were drops of 30 per cent in the failures occurring in the East North Central, West North Central, and South Atlantic States. Urban failures in the twenty-five largest cities outnumbered those of a year ago with New York and Philadelphia sustaining the most noticeable increases. Non-metropolitan failures were below 1950.

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The Business Bookshelf

WHAT HAPPENS DURING BUSINESS CYCLES, by Wesley C. Mitchell. National Bureau of Economic Research, 386 pages, \$5

. JF A MAN ever had a soul that lived after him, it is this distillate of nearly everything that Dr. Mitchell ever wrote, said, or breathed, during the final days of his productive life, on the one subject that fascinated him beyond all else. Here is a complete account of a pioneering approach to the business cycle, considered by some economists as the nemesis of capitalist enterprise; the eventual success or failure of our entire system of economic freedom may well rest upon its solution. Arthur F. Burns, a co-worker and long-time intimate of Mitchell's has performed an unmatchable service in editing a profusion of posthumous notes and observations into a concise presentation of the problem to date.

THE SALESMAN'S TREASURY, ed. by Lawrence Lariar. Crown Publishers, 401 pages, \$1.50.

A newly commissioned retail clerk noticed with trepidation that the opening sale for an equally new store was coming to an end after a period of months. Rushing up to the proprietor, he anxiously asked how customers were now to be enticed into the store. "Oh, don't worry," reassured his boss, "tomorrow we start the closing sale." The foregoing is just one minor example of the kind of thing the reader should expect from this exotic omnibus of salesmanese. Everything from jokes and jeremiads to parodies and parables are to be found here, the one qualification being that they have something to do with the hallowed traditions of that American: homo huckstevius.

AMERICAN MONETARY POLICY, Committee for Economic Development Resewich Study, by E. A. Goldenweisser, McGraw-Hill Book Company, Inc., 391 pages, \$4,50.

Plus ça change—plus c'est la même chose. The verity of the old French proverb that "the more things change, the more they remain the same" is reaffirmed as one reviews the life and times of the Federal Reserve System which constitutes the substance of this book. Despite all the wars, depressions, and economic and social upheavals that have rampaged since the System's inception in November 1914, the basic facts of economic life which

CURRENT READING

ROOK

PUBLIC RELATIONS, EDWARD L. BERNAYS, AND THE AMERI-CAN SCENE. F. W. Faxon Co., 92 pages, \$2.

DETERIORATION IN THE QUALITY OF FOREIGN BONDS IS-SUED IN THE UNITED STATES 1920-1930, by Ilse Mintz. National Bureau of Economic Research, 100

HARRY RIEMER'S BRIEF FOR SALESMEN, by Harry Riemer. Fairchild Publications, 27 pages, \$2.

THE ROLE OF MEASUREMENT IN ECONOMICS by Richard Stone. Cambridge University Press, 85 pages, \$2.50.

TIMESTUDY FUNDAMENTALS FOR FOREMEN, by Phil Carroll. McGraw-Hill, 209 pages, \$3.

THE THEORY OF INVESTMENT OF THE FIRM, by Friedrich and Vera Lutz. Princeton University Press, 253 pages, \$4.

SUMMARY

An unusual collection of utterances and writings by and about America's foremost exponent of the scientific molding of public opinion. Covers his career to date.

Foreign bond fluctuation is one aspect of business cycle analysis. This study was completed under the auspices of an organization pioneering in cyclical research and should be of intense interest to those at home with charts and tables, and with statistics generally.

Subtitled "The Front Line of Industry," this neat little compilation of homely hints for, by, and about commercial travelers was written by the editor of the Daily News Record.

The third in a series of monographs based upon the Newmarch Lectures given at University College in London, it covers thoroughly the problem of accuracy in measuring national income, expenditure, and so on.

A production manual dealing with the whys and hows of timestudy and designed for use by those whose function it is to serve as liaison between management and employee.

A technical treatise bearing upon the relationship between the market system and production. The balance sheet of a typical manufacturing firm is employed as the unit of analysis. This volume should prove enlightening to many business men.

embrace and canalize American monetary policy have remained constant. In the analytical light of such basic economic concepts as money supply, demand and supply of credit, and interest rates together with the more personal light that could only come from the author's many years of experience as Research Director of the Federal Reserve Board, Mr. Goldenweisser reviews in scholarly fashion Federal Reserve policy from its establishment to the Autumn of 1950.

Though scholarly in approach and dignity of presentation, the work is couched in a non-technical phraseology which should make it enjoyable as well as instructive reading for those business men, bankers, and legislators who wish to further their understanding of the historical background and contemporary undercurrents instrumental in shaping present-day monetary policy.

Frequently a reader will encounter such epigrammatic gems as the author's definition of a black market: "a mechanism of adjustment between rules and reality, between market forces and official make-believe." Or again in speaking of the Federal Reserve Board's dilemma of dual responsibility between counteracting the forces of inflation and supporting Government security prices he poses "Is the holder more concerned about being able to sell his bond at par, or being able to buy as much with his money when he sells the bond?"

In retrospect the author finds that most of the crucial policy decisions of the Board have been in the right direction. While they may not always have been sufficiently prompt, vigorous, or consistent, they have always shown "a high sense of responsibilty and a recognition of economic stability as the main objective."

For smoother future operation the author recommends that the present Board of Governors be supplanted by one Governor with perhaps two deputies, the former to be elevated to cabinet rank. This, he believes, would create a healthy balance between the monetary policy of the Federal Reserve System and the fiscal policy of the Treasury Department. It would also tend to attract men of high caliber with wide business or banking experience to assure the System's future efficacy.



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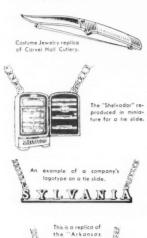
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HERE and THERE in BUSINESS

WHAT'S NEW AS OBSERVED BY THE AGENCY'S REPORTERS



Helicopters—Industry is offered a new tool in the leased helicopter. As many of the recently developed applications for this form of aircraft are of short duration, users find that it pays to rent rather than buy them.

Such a service has been inaugurated by Helicopters for Industry, a branch of Helicopter Utilities, Eastern Hiller aircraft distributor, White Plains, N. Y.

The renting agency points out that one new use for helicopters is for progress reports on large construction jobs.

Helicopters also have been used for bringing construction material into more or less inaccessible places. This is due to the fact that they can rise and descend without any runway.

With helicopters, inspectors can effectively patrol power lines in rough terrain where such patrolling is difficult by truck.

The Federal Communications Commission is for the first time considering accepting radio frequency reports made from an aerial vehicle.

Having brought back a tuna fleet 30 days ahead of schedule, helicopters now are being considered for whaling. Helicopters can land and take off from platforms measuring 40 by 40 feet built on the back of whaling mother ships.

Daylighting may be accurately predicted for factories and offices before the building is constructed.

The charts for computing the amount of daylight which will be present in a room at any time of day and any day of the year were compiled through several years of work in the Pittsburgh Corning Corporation's Daylighting Research Center. They are known as the "Daylighting Nomograph."

Applicable for use in all parts of the United States and Canada, the charts may be obtained from the Pittsburgh Corning Corporation, Pittsburgh.

An adjustable conveyor, easily handled by one man, has been introduced by the Stewart-Glapat Corporation, Zanesville, Ohio. This is a companion to the basic model "Adjustoveyor" (see Dun's Review, February 1951, page 48).

The unit is intended for applications which do not require the extreme length or the load-carrying capacity of the regular Adjustoveyor. However, it has most of the basic features of the larger model.

Measuring 10 feet closed and 17 feet 6 inches fully extended, the new conveyor can be operated at any distance in between. It will stack to a height of 10 feet, with a maximum stacking angle of 30 degrees. A total weight may be carried of 850 pounds and a maximum unit weight of 300 pounds.

Tape Dispenser—Working on the principal of a dial telephone, a gummed tape machine automatically dispenses the length of tape required.

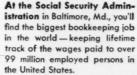
With the "Dial-Taper," manufactured by the Marsh Stencil Machine Company, Belleville, Ill., the operator selects a number on the dial corresponding to the length of tape required. A twist of the dial starts and stops the machine.

Dispensary—How small plants may co-operate to provide an efficient dispensary and public health service for their employees is illustrated by the Petrie Clinic in Atlanta.

The idea of such a clinic developed after an infected scratch had caused a worker to be hospitalized and compensation payments had cost his employer \$3,000. Deciding that he could not afford to be without the health and

How Recordak microfilming helped simplify

The biggest bookkeeping job in the world



And here, you'll find Recordak microfilming at work—simplifying the operation in this manner



99 million ledger sheets eliminated by microfilming punched-card listings.

As the employers' quarterly reports of taxable wages paid to each employee are received, punched cards are prepared, balanced, and accumulated in account-number sequence.

At the end of the fourth quarter (in the cyclical work schedule) . . . a tedious and costly bookkeeping operation is eliminated . . . a revolutionary advance takes place—

The punched cards are no longer posted to individual employee ledger sheets. Instead, they are "run off" as continuous listings, in account-number sequence.

And then Recordak microfilming copies these bulky listings with photographic accuracy and completeness... recording a year's activity for a thousand employees on approximately 2 ft. of 16 mm. film.

Saves tremendous amounts of filing space ,
Duplicate film copies are made from each roll of Recordak
Microfilm. Then these copies are cut into "1,000account" sections, and spliced to reels which contain
the previous film record of these accounts—including
copies of the original ledger sheets.

This simplified system will enable *Social Security* to keep a 35-year record of 1000 employees on a roll of film that's no larger than your palm. *Contrast this* with the old system: 3 ledger sheets would have been required for each account; 3000 for 1000 accounts; 297 million for 99 million accounts.

Protection increased

The master film records—the photographically accurate and complete Recordak Microfilms—can be vault-stored conveniently . . . another advantage over the bulky ledger sheets, which were exposed to constant wear-and-tear, and the possibility of fire and loss!

Just another example, this, of the way Recordak microfilming is serving Government... and 65 different types of business... thousands of concerns.

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Edison TeleVoicewriter

The Televoice System

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safety programs existing in larger companies, this employer lunched with top men in neighboring plants,

As a result, the Atlanta Oak Flooring Company, the Warren Company, and the Williams Brothers Lumber Company initiated a co-operative program for health maintenance last year. The clinic is housed in two basement rooms in a gymnasium conveniently located to the three plants.

Two persons comprise the staff. The doctor spends from 1:30 to 4:30 each afternoon at the clinic. The nurse puts in one hour each day in the first aid room of each of the three plants. She is at the clinic for five hours.

While the total emloyment for the three co-operating plants is less than 800, the clinic in the first six months took care of 979 new cases of which 591 were the result of work situations. Likewise, there were 1,347 revisits. Seventy applicants for employment were examined and a plan was put into effect for annual physical check-ups.

Nurse's visits are provided for emergency service to ill employees, and to carry out doctors' instructions.

It cost less than one dollar per month per employee to operate the clinic for the first three months, including initial equipment.

Prefabricated Homes—Leading American architects have planned the Peaseway "New-Design" homes. These prefabricated dwellings are of contemporary architecture, designed to coordinate indoor and outdoor living areas. They are in production at the Pease Woodwork Company, Cincinnati, which has engaged in manufacturing prefabricated homes since 1940.

Efficient Packaging—Suggestions for direct and indirect saving of film for packaging are made by du Pont as a result of hundreds of case studies in customers' plants.

Five different ways in which more film is being used than is necessary are listed in a recent number of *Packages* & *People*, published by the du Pont film department.

Roll widths can sometimes be reduced without sacrificing protection, it is pointed out. Bakers who use end labels in their bread packaging can often use a shorter fold inasmuch as the labels further secure the seal. In this way one baker shortened his roll width from 16 inches to 15, saving the equivalent of one roll in every 16.

Greater overlaps than are necessary often result from poor machine adjustment, it is indicated. The machines can be regulated to provide the minimum necessary for a good wrap. This adjustment can be maintained if it is watched carefully by operators on each of the shifts.

A further suggestion is that shapes and sizes be changed, where practical, to save film. One way is to reduce the size of the tray. Another is to eliminate the fold-over on the top of a bag and heat seal the top instead of stapling it.

Users are urged to employ the type of film recommended for their product and avoid substituting a film which may give a smaller yield. Stub rolls may be carelessly discarded. One company, to avoid this, uses its rolls of film down to the core and requires a daily report on waste.

Indirect savings on film may be accomplished by storing film in a clean, dry place and avoiding extremes of temperature and humidity; by making sure that machines for automatic packaging are adjusted for smooth operation; by keeping machines thoroughly cleaned; and by educating employees on the need for saving film.

Functional Operating Reports-

To an increasingly larger extent corporate reports are being presented to employees, stockholders, and the general public in simple language.

Among the companies issuing simplified employee reports are the Univis Lens Company, Dayton, and the Donaldson Company, Inc., St. Paul, manufacturer of air cleaners for engines.

Each report is closely patterned after the form suggested in *The Functional Operating Report*, a 22-page manual published by the American Economic Foundation in 1947 (see Dun's Review, November 1947, page 40). This was based upon a five-year study of the language of corporate operating reports. The idea of a "functional operating report" was originated ten years previously by the late Orlando F. Weber, chairman of the board of the Allied Chemical and Dye Corporation.

The reports list the receipts from cus-



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(Above) New office layout for large industrial company.

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Your office can find EXTRA work room in the same floor space—

Best time to plan for tomorrow is NOW! There are many new ways to CREATE more office space by revising old layouts, streamlining work flow. This new-day engineering makes everyone's work easier — saves space, saves time, saves money.

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Consult Art Metal when you need expert office planning advice and service. Get your copy of "Office Standards and Planning," the nationally recognized handbook on this subject. Call your local representative or address—Office Planning Service Department, Art Metal Construction Co., Jamestown, N. Y.

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tomers for goods and services. They then explain that this money was used to meet the following costs: goods and services bought from others; human energy (wages and salaries); tools wearing out (depreciation, depletion); payments ordered by government (taxes); using the tools(profits). A chapter of text elaborates on each of the entries.

The American Economic Foundation reports that there is a trend toward incorporating the functional operating report in a special edition of the employee magazine. The money normally spent for extra printing thus can be used for illustrating the report.

Other companies are including the simplified employee report as an insert in the report issued to stockholders. Still others present the same functional report to each group.

Additional companies, such as the Connecticut Power Company, Hartford, use this type of report as a public relations tool. This company presented the functional earnings statement as an advertisement in the newspapers in the Stamford and other divisions of the Company. It also was mailed to stockholders.

In various companies the simplified statistics are just used internally for the economic education of employees, such as in supervisors' conferences. This is the case with the United Airlines.

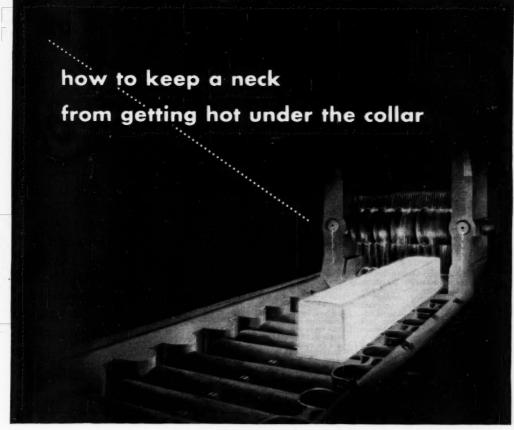
The Naughatuck Valley Industrial Council, a Connecticut organization, groups the experiences of 50 member companies and gives a summary to the employees of each company.

Fire Hazards—As production pressures increase so do fire hazards, the Engineering Division of the Associated Factory Mutual Fire Insurance Companies points out. It lists the following potential dangers and the steps which may be taken to correct them:

r. Serious fires have been started by men who weren't told about the fire hazards of their jobs. Supervisors, it is indicated, should know these hazards and outline them carefully as a part of a man's job training.

2. Fatigue may make employees careless of hazards. Care is suggested for over-busy machines.

3. Fires are more likely to occur when a plant is operating than when it is idle. The availability of trained



This roll neck bearing provided 320% longer service life and rolled a record 1,290,000 tons of steel

In a blooming mill, the rolls of huge presses knead white hot steel in bloom or ingot form and roll it into bar stock.

When these massive rolls put the squeeze on the bloom, tremendous pressure also squeezes the bearings that cushion the ends, or necks of the rolls. Ordinary bearings heat up and go to pieces in such service. In fact, bearings at one major steel company lasted from a minimum of only 4 weeks to a maximum of five months. Tonnage rolled ranged from 74,800 to 400,000 tons.

Our National Bearing Division re-

formulated and redesigned a bearing that stood up under this rigorous service for 11 months and 8 days, rolling 850,000 tons! The second bearing served 16 months and 4 days and rolled 1,290,000 tons at a cost of only \$.0003 per ton! The initial cost of this new bearing is about one-fourth less than that of previous bearings.

4Results like this stem from over 40 years of metallurgical research, design, and engineering experience. This practical know-how is at your service regardless of the type and kind of bearing problem you may have, Write Dept. B.





10 Divisions of American Brake Shoe Co. produce wear-resisting parts in 54 American and Canadian plants.

AMERICAN BRAKEBLOK DIVISION • AMERICAN FORGE DIVISION • AMERICAN MANGANESE STEEL DIVISION BRAKESHOE AND CASTINGS DIVISION • ELECTRO-ALLOYS DIVISION • ENGINEERED CASTINGS DIVISION KELLOGG DIVISION • NATIONAL BEARING DIVISION • RAMAPO AJAX DIVISION • SOUTHERN WHEEL DIVISION

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BASIC FACTS ABOUT MODERN MATERIALS HANDLING

HOW IT WORKS - WHAT IT DOES-WHAT IT SAVES

Study of major importance to business and industry is made available by CLARK

A practical, profitable way to produce more goods with the same amount of human effort, is presented simply and graphically in a new booklet offered by the Industrial Truck Division of the Clark Equipment Company, of Battle Creek, Michigan.

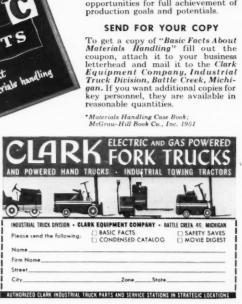
This booklet points up technological advances in materials handling operations that are effecting extraordinary benefits for industry—such as faster production, increased economy and efficiency, improved human relations, lower accident and damage rates, quickened distribution and substantial cash savings. Simply and directly it describes tested and

proved means to help speed up and perfect the imperative integration of a military and a civilian economy

2-BILLION SAVING POSSIBLE

Concretely, this study points up a quick and certain way for Industry to save some \$2,000,000,000* annually at a time when the country, faced with a rearmament program of 50 billions a year for at least three years, is in desperate need of every possible mechanical aid to save time and speed production. Many advantages in other directions, not reckoned in dollars and cents, will be recognized at once by every reader.

This new CLARK study is neither fancy nor complex. It is a well-illustrated, simply-written exposition of the sound and sensible fundamentals on which modern materials handling techniques and practices are based. It describes ways and means of getting the most out of fork-lift trucks, powered hand trucks and industrial towing tractors, at the least possible cost. For the many businesses which have not yet adopted modern handling methods and machines, the booklet will be found invaluable. For the thousands of progressive businesses already employing modern methods and machines, it is just as valuable as a check against omissions, abuses and opportunities for full achievement of production goals and potentials.



men is advised for each of the shifts.

4. Stockpiling needs complete fire protection. The importance is emphasized of subdivision, method of piling, location, sprinkler protection, and watch service.

5. Shortage of fire protective equipment may develop in any all-out war effort. Companies are urged to replace now whatever is out of date and to add recommended new equipment.

6. Speed-up may result in the formation of explosive mixtures. Manufacturers are cautioned that industrial ovens are designed to operate safely at specified conveyor speeds, temperatures, and solvent evaporation rates.

7. Special hazards may exist in war contract processes. Firms are advised to consult their insurance companies as to special hazards. One example is the spraying of olive drab paint; the residue is subject to spontaneous combustion. A remedy in this case is waterwash spray booths which collect the residue as a water-sludge.

A collapsible drum of 55-gallon capacity, formed of synthetic rubber-fabric, has been devised by the United States Rubber Company. The container is both reusable and returnable.

Tests indicate that the drum is suited to the shipment of oils, greases, fats, acids, paints, emulsions, soaps, dry powder, and a variety of pharmaceutical industrial chemicals. More than 2,500 collapsed drums can be shipped in a standard railroad box car.

Inspection Table—Turnover and rewinding in the inspection of coils of strip metal or other materials are eliminated through the use of a novel inspection table. This was designed by the Riverside Metal Company, Riverside, N. J.

Formerly, in order to inspect coil strip, small coils were unwound, inspected on one side, turned over, inspected on the other, and then rewound. Large coils were unwound, inspected on one side, rewound, then unwound again, inspected on the other, and rewound. The



new machine permits inspecting both sides in one operation.

It was originated to inspect coils of phosphor bronze, nickel silver, cupronickel, and beryllium copper alloys. However, it may be modified to serve the textile, rubber, linoleum, roofing paper, and other fields in which material must be unrolled for inspection.

Keeping Records—Accepted practises for the indexing and filing of current and older records and for the periodic weeding out and destruction of over-age papers are reviewed in the Manual of Record Storage Practise. This is published by the Bankers Box Company, Chicago.

The 24-page booklet considers the setting up and functioning of a committee to pass on record retention, the organizing of inactive files, transfer methods, indexing and serial numbering, and shelving for record rooms. Also discussed in the pamphlet are methods of disposing of records, safe retention periods for records of every nature, and methods of storing various types of material.

Robots—Mechanical or electronic "brains" are sorting, measuring, and counting industrial products much faster than humans can.

One such device can measure rapidly-moving red hot steel. Another, used in the manufacture of glass tubing, measures the tube at the point where it is produced and, many feet away where it is finally cut off, the implement "recalls" the measurement and channels the tube into a bin with the right size classification. In the sorting of parts to very close dimensional accuracy one device has a theoretical capacity of 30,000 measurements per second.

How such equipment functions was discussed at a meeting of the American Society of Tool Engineers by A. C. Sanford, Federal Products Corporation, Providence.

Waste Paper—A unique waste paper drive in Sandusky, O., netted 129 tons to ease a critical need for the Hinde & Dauch Paper Company.

Art Director H. J. Zeitzheim of the paper concern conceived the idea of a "Junior Aid Conservation Klub," "Jacks" for short. Each child turning



IDEAS TO ELIMINATE NON-PRODUCTIVE WORK

Paperwork Simplification



Dual Feed registers Check, Journal forms for continuous operation.

A large insurance company today writes three times as many checks per hour as formerly, and does the necessary posting, as the result of their new Standard Register continuous-form method of writing. In one operation they now write a check, post an account ledger card, make the journal entry, and automatically punch a tabulating card. Production was upped from 400 checks per day to more than 150 per hour! See the story in PS. 22.*

Today our representatives are devoting full time to helping our customers re-examine their requirements, get the most out of their present Standard Register form-systems. With this three-fold improvement objective:

- **A.** Develop the best procedure, by eliminating non-productive steps, combining and simplifying operations in office and factory.
- **B.** Simplify the writing process, through the use of auxiliary devices, e. g., in the case above, a Burster-Imprinter that signs, trims, and detaches checks 5 times faster than previously
- C. Design the most efficient form, to cut writing costs by reducing lost motions, making one form do the work of two, etc.

*PS.—the magazine of Paperwork Simplification, makes these ideas available to you. Write for *free* copy. The Standard Register Co., 4709 Campbell Street, Dayton 1, Ohio.





KANT-SLIP





AUTOMATIC LINE

Advances form into new writing position in one motion



DUAL FEED

Registers 2 different forms for 1 continuous typing operation



BURSTER-IMPRINTERS Sign, date, number, trim, tear off, stack

FORM-FLOW REGISTERS

Better records



UNIT ZIPSET FORMS

in a bundle of paper to his or her school received a membership card, issued by their teacher. The card admitted the child to a special showing of a motion picture at the town's largest theatre on a particular Saturday morning.

Corrections are made through simply talking over the previous, undesired section of the plastic or paper disc recording produced on the new "Voice-Master" dictating machine.

The ro-pound instrument, manufactured by Magnetic Recording Industries, New York City, operates on the electronic-magnetic principle. When the machine is used by travelers, messages are transcribed on thin paper discs which may be folded, even wrinkled, and mailed in any standard envelop. The stenographer needs merely to unfold the disc before putting it on the combination dictating-transcribing device. For office purposes plastic discs are employed.

The 7-inch magnetic discs may be used over and over until they are either punched or torn. New messages are talked over older ones or erasures are made quickly by passing a small magnet over the previous recording.

Another feature of the Voicemaster is an on-the-disc indexing system.

When it is necessary to guarantee the privacy of a message, the recording arm is guided by a disc grooved in an irregular manner. This disc is produced from a die made to order for the customer. The playback of the message will be badly garbled unless it is done on a machine using a disc formed from the same die.

A new plan makes it possible for business houses to procure the Voicemaster on a rental basis.

This equipment is a further development of the original Brush "Mail-A-Voice" recorder. It is manufactured under license from the Brush Development Company, Cleveland.



Male vs. Female—Do housewives work harder than their husbands?

Wives were invited to visit the Socony-Vacuum Oil Company refinery at Trenton, Mich., to see where their husbands worked and the kind of work they performed. The management's invitation stated:

"We hope you girls will avail yourselves of this invitation for it should do much to settle the age-old question as to whether a man does as much actual work on the job as a woman does in running a household."

An automatic typewriter which combines in one compact machine with a single keyboard the facilities both for tape perforation and multiple copy reproduction has been marketed by Commercial Controls Corporation, Rochester, N. Y. This serves as an ordinary electric typewriter when not required for multiple reproduction.

The "Flexowriter" will automatically perforate duplicate master tapes for other units. An address list can be perforated on tape while headings on letters are being manually typed. Such tape then can be employed for addressing envelops or other mailing pieces.

A stenographer types the original letter on the Flexowriter's electric keyboard, making in one operation a copy to be read and a master tape for multiple reproduction. The tape, which can be spliced to form a loop, is placed in the tape reader, a button pressed, and multiple reproduction is underway.

Boots and Saddle—It's a busy time as young cowhands throng the "old corral."

Missing is the sage, the dust, the smell of horseflesh, and the cries of the wranglers. Stranger still is the presence of these corrals in the once staid children's departments of city banks.

Banks in 25 States have started Hopalong Cassidy Savings Clubs. Some of these institutions have converted their children's department into a Western corral where decorations, costumes, and entertainers add to the cowboy spirit.

Children may join the savings clubs by opening an account as small as \$2. They rise in the cowboy hierarchy as the amount of their savings grows. The tenderfoot becomes a wrangler when he has saved \$10; a bulldogger when he has accumulated \$25; and so on up to a Bar-20 foreman.

The new member is given a plastic savings book and pass book. Then directly from Hopalong he receives a Western thrift kit containing his picture in color, a secret code, a membership certificate, a membership card, a personal letter from Hopalong, an official saving rodeo badge, and so on.

Ladders may be used safely on uneven surfaces through a stabilizer marketed by the Mine Safety Appliances Company, Pittsburgh.

The "Hydro-Lizer" is attached to the lower end of straight or extension ladders. Its two steel legs operate as plungers in vertical tubes, permitting the ladder to be employed in locations where the legs would not be on the same level.

Safety Signs—A variety of self-adhesive safety signs are marketed by the W. H. Brady Company, Milwaukee, manufacturer of the "Quik-Label" wire, pipe, and conduit markers.

Mounted on handy dispenser cards from which they may be easily removed, the labels adhere without moistening to any clean surface. They are printed on extra-strength cotton cloth in large bold letters on the proper safety background. Each is coated with silicone plastic which protects it from dirt, grime, moisture, and the weather.

The average executive secretary is 36 years of age, has worked for her present employer for 8 years, and is earning, on the average, a salary of \$255 per month.

These statistics are based on a 38.7 per cent return in a survey of 10,000 professional secretaries, located in 44 States. The study was made by *The Secretary*, official organ of the National Secretaries Association.

Of these secretaries, 39.3 work for industrial firms; 16.2, professional men; 17.7, government; 12.3, retail firms; and 14.5, miscellaneous. Positions with company executives are held by 53.5 per cent of those surveyed.

The marital status of these workers is as follows: 52.8 per cent are single; 30.6, married; 11.9, divorced; and 4-7, widowed.

The average yearly expenditure for



50,000 FIRMS, including most of the biggest companies, prefer Speed Sweep to all other sweeping tools. Here is proof that Speed Sweep defies comparison. The only better proof is to test Speed Sweep and see for yourself how this better brush sweeps cleaner, faster and easier and outlasts ordinary brushes 3 to 1. Speed Sweep sizes and styles fit all kinds of floors and sweeping conditions. Write today for complete facts.



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Several flexible plans for obtaining ready cash, including participations with banks, are available using as security:

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Associates—one of America's largest independent finance companies—offers a comprehensive commercial financing service backed by more than thirty years of successful experience. Medium-term credit and rediscount facilities provide continuous arrangements which are of increasing importance in supplementing existing bank lines.



ASSOCIATES INVESTMENT COMPANY ASSOCIATES DISCOUNT CORPORATION SOUTH BEND, INDIANA

CAPITAL AND SURPLUS IN EXCESS OF \$58,000,000

Portable HEAVY DUTY

RACKS

| Gor quick convenient storage of steel shapes simplified for one-man operation. Using overhead crane for storage in tiers, range overhead crane for storage in tiers, range overhead crane for storage overhead crane

office equipment and supplies per secretary is \$3,199. The secretaries are asked concerning their preference in 67.2 per cent of the cases and 38.6 per cent of the latter do the actual buying.

By way of education, 51.7 per cent of the secretaries are high school graduates; 49.3, business school; and 23.2, college or university.

Training Outside Workers—An interchange of ideas between workers of neighboring plants is made possible through the current worker training and education program in effect at the Dravo Corporation's Neville Island plant near Pittsburgh. This company is engaged in shipbuilding and in engineering and construction work.

The 15-week after-work classes in advanced and fundamental blueprint reading, conducted by Dravo's industrial relations department, were opened to employees of other companies located in the same area. Certificates are awarded to persons completing the courses.

Such instruction, offered entirely on a voluntary basis, is provided in company facilities by a company teacher under the State and Federal Vocational Education Program through the co-operation of the local school district. While additional industries have sponsored courses under this program, classes generally have been held in school rather than in industrial facilities. Other technical subjects will be taught at Dravo as the need arises.

Light Switch—A simple delayed action electric light switch, which does not require a timer, is available from the Electric Deodorizer Corporation, Detroit, Mich.

When such switches are placed throughout a plant or store they permit a night watchman to go from point to point in full light, turning off the lights as he goes. Likewise, in closing up for the night, a merchant or manufacturer may have light to see by in leaving a building. The switch also has consumer applications.

The delayed action is controlled by a spring loaded neophrene diaphragm which operates in a sealed aluminum chamber. When the switch is turned to the "on" position, the chamber is exhausted, creating a vacuum. When



A PARTIAL LIST OF SPECIAL AND STANDARD EQUIPMENT

- 93 PRESSES—Capacities from 1 ton to 125 tons
- 6 PRESS BRAKES
- II LEAF BRAKES
- 128 SPOT, BUTT, SEAM AND ARC WELDERS — with special, automatic equipment
- 12 SHEARING PRESSES—capacities to 30 tons
- 29 SINGLE, MULTIPLE AND RADIAL DRILL PRESSES
- II POWER SAWS
- 27 GRINDERS-including Blanchard
- 9 LATHES AND TURRETS
- 4 MILLING MACHINES
- SPECIAL AUTOMATIC WIRE FORM-ING MACHINES
- FINISHING FACILITIES Galvanizing, automatic plating, dip, spray, burnishing, etc., drying ovens
- COMPLETE SHIPPING, packing, materials handling, undercover docks,

385,576 SQ. FT. MODERN PLANT FACILITIES FOR SUBCONTRACTING

The location of your contract supplier is mighty important to you for "ON TIME" delivery at lowest transportation cost and to guarantee uninterrupted, efficient production.

UNION STEEL's non-strategic, centralized location makes it your ideal supply source. Able management, an engineering and production team experienced in contract manufacture, with an integrated plant to back it up, can give you everything from practical design to finished components or complete products, delivered ON TIME to conform to your contracts.

USP's specialized manufacturing includes welded wire assemblies, sheet metal parts, heavy equipment and many other products which can be produced with our standard and special equipment.

Let USP engineers and designers help you with your regular or defense product problems. We are as close as your telephone. Call us today!

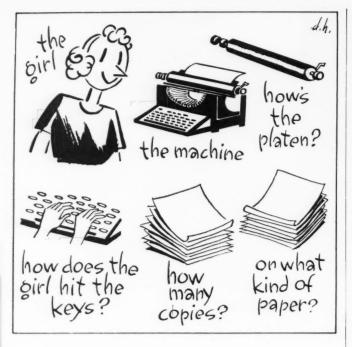
IF IT'S MADE OF WIRE OR METAL WE CAN SERVE YOU BETTER...FASTER...MORE ECONOMICALLY

WRITE FOR BOOKLET
LISTING COMPLETE
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UNION STEEL PRODUCTS COMPANY

42 BERRIEN STREET . ALBION, MICHIGAN





mix well and consider thoroughly

Here are the ingredients—just in case you'd like to know what goes into the proper selection of carbon paper. You see, since there's such a wide range of difference (and results) among even the finest brands, it really takes a ribbon and carbon expert to come up with the right answer.

So when your local Columbia ribbon and carbon representative or stationer's salesman comes a'calling, don't take him lightly . . . don't shoo him away. His experience is valuable to you. He has been specially trained to help you get greater satisfaction from typewriter ribbons and carbon papers and save money in

carbon papers and save money in the bargain. He can show you how seemingly little things like ribbons and carbons can lift the spirits of your office force and improve its efficiency.

Find out! Greet the Columbia man with an open mind the next time he stops in. Better still, use the coupon below to

send for him at your convenience.

Naturally there's no obligation.

COLUMBIA RIBBON & CARBON MFG. CO., Inc.

Main Office & Factory:

130-9 Herb Hill Road, Glen Gove, L. I., New York New York Sales and Export: 58-64 West 40th Street Branch Offices and Distributors in principal cities Consult your local Telephone Classified Directory

it is moved to "delay," the vacuum is diminished and upon being fully dispersed permits the light to be automatically turned off.

A screw driver is all that is needed to install the "Edco" switch in any standard wall switch opening.

Air Conditioning—What five vital functions should an air conditioning system perform? What should be expected from such a system? What factors should be considered when actually planning one? These and other allied questions are answered in A Planning Guide for Commercial Air Conditioning, published by the Sturtevant Division of Westinghouse Electric Corporation, Boston.

Employees' Inventions—Ideas in any field which have marketable possibilities are encouraged from employees of the Brown-Forman Distillers Corporation. If these can be worked out successfully, the inventor will receive either a percentage of the gross sales or of the income from the licensing of the patent. Such products or methods need have no connection with distilling.

The underlying purpose of the plan is to help employees to develop themselves through development of their ideas. To this end, The Brown-Forman Industries have been established to engage in research, development, manufacture, and marketing of new products. The regular Brown-Forman laboratories and shops are used for the work.

No matter how far fetched ideas may seem they are carefully studied for possible production and marketing. The only prerequisite on the submission of ideas is that they must be sufficiently developed to the point where only a working model and final research testing are necessary.

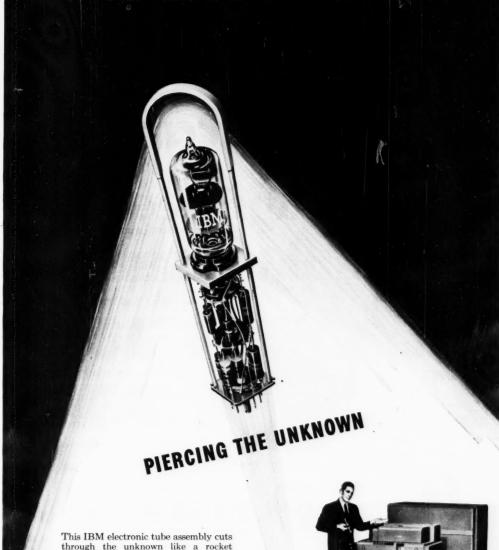
Machine Oil Temperatures—A refrigerating device for controlling the temperature of cutting, lubricating, and hydraulic oils for machine tools is available from the B. S. Williams Company, Mount Vernon, N. Y.

The heat generated in tooling processes resulted in many problems during World War II. The Williams machine grew out of the wartime ex-

(Continued on page 48)

Columbia

Carbons for Nearly Half a Century"



through the unknown like a rocket through the stratosphere.

It probes the mysteries of the atom's core; predicts critical wing flutter of fast aircraft; traces paths of light through a lens system; calculates trajectories of guided missiles; plots the course of planets for the navigator.

It calculates payrolls, inventories, costs; points out savings of time and money.

These compact, pluggable units are the heart of IBM Electronic Calculators.

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45

SEPTEMBER - 1951

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None burns brighter, none lasts longer than Westinghouse fluo-rescent lamps. For factories, stores, offices, schools or public buildings, their lifetime record is





PERFORMANCE..

Since the introduction of Westinghouse fluorescent lamps, light output has been steadily increased, life lengthened, and price reduced Today's new discounts are new, added proof of Westinghouse progress in lamp leadership.



Measured by any yardstick, whether quality of light output or lamp life, there's no better value for the money.

Effective immediately, Westinghouse fluorescent lamps will be sold at new, greater discounts to quantity buyers. All types and sizes of fluorescent lamps come under this money-saving order: standard fluorescent tubes, slimlines, and circlines—you save on all!

In quality, these lamps remain unsurpassed! Their end-to-end brightness, their uniformity of color, and, above all, their dependable performance for thousands of hours add up to value that is not topped.

So, whether you buy a few tubes or a few thousand, whether you are a regular Westinghouse customer, or a prospect, take advantage of these important savings.

For details, call or write the Westinghouse sales office nearest you. See list at right. Westinghouse Lamp Division, Bloomfield, New Jersey.



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Westinghouse fluorescent lamps at

NEW LOW NET PRICES

on quantity purchase

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Want to know how to <u>keep</u> your best office personnel?



Sure there are a lot of jobs floating around today, but just ask some of the applicants what they look for in an employer. If they are conscientious, they look for the proper equipment so they can do a good job. To give his employees the right tools to work with my boss arranged an office equipment replacement plan with a Security Steel representative. Their CRESTLINE Files are a secretary's dream come true. In CRESTLINE Files all this talk about new efficiency in filing is put right to work. My company looked at them all. We picked CRESTLINE Files. Maybe they'll help answer your personnel problem. Why not take a look at CRESTLINE?

Crest Line

SECURITY STEEL EQUIPMENT CORP.



periments to pre-cool the cooling agents. • The device is intended primarily for use with production machinery rather than for intermittent or job shop operations.

The principle of this equipment is to maintain the oil at a pre-determined temperature which is accomplished by a gravity circulation of the oil over the cooling coils. Removal of the heat increases the capacity of a machine, lessens the need for adjustments, and brings longer tool life and more uniform work.

Pre-graduation training for engineers is provided in the Co-operative Engineering Program operated by the Massachusetts Institute of Technology with the assistance of 19 industrial companies.

Such a program helps a student decide which branch of engineering he is best suited for, so that he may arrange his studies for the remainder of his undergraduate work. It likewise permits the sponsoring company to determine whether such a person can fit into their organization after graduation.

Four promising students, who have completed their Sophomore Year, spend six months in the plants of each of the participating companies. There they receive individual attention from key personnel. They make up their work during Summer vacations so that they may graduate with their class.

Solder—The selection of the proper solder for a particular job and the way in which it should be used are covered in a new brochure. This 36-page booklet on the nature, properties, and uses of solder is available upon request to the Federated Metals Division, American Smelting and Refining Company, 120 Broadway, New York City.

High-Speed Facsimile—Transmission and recording of words or illustrations at the unprecedented speed of 130 square inches of material a minute is attained on a new facsimile machine developed by The Western Union Telegraph Company. Copy occupying 8½ by 11 inches is transmitted in 40 seconds.

"High-Speed Fax," an improved machine for handling a heavy volume of copy, will reproduce approximately 3,000 words a minute in newspaper

How EBASCO can help on plans for

FINANCING and REFINANCING



When a business is to be expanded, a basic problem is HOW to get adequate capital at minimum cost. The road to the capital market is full of stumbling blocks, the greatest of which are the many procedures and regulations involved in issuing securities.

That's where EBASCO can help . . .

Ebasco's financial consultants are specialists in this field. In the past few years we have assisted clients in obtaining capital in amounts totaling more than \$1,900,000,000. The particular problem is studied and financing plans developed. Advice is rendered on appropriate methods of financing, how to file and prepare the registration statement, how to prepare the diverse material required by the SEC, how to find the proper underwriters of securities,

and how to time the marketing of the securities.

Not only do you have a sound plan for marketing securities, but executives are unencumbered by the details of financing and are able to handle their regular duties with a minimum of interruptions.

Ebasco's financing specialists will be happy to outline their services at your request. There is no obligation for preliminary discussions. Feel free to call on us.



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Inspection Taxes & Expediting Traffic

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Ebasco Teamwork gets things done anywhere in the world

Could you stay in business?



1 IF YOUR OWN RECORDS WENT UP IN SMOKE, What would you do? 43 out of 100 businesses whose records are lost by fire just don't reopen.



2 BUT YOUR BUILDING is "fireproof"? Better know, now, that this simply means that a fire which starts in your office will be walled-in and intensified.



3 AND YOU'RE ALREADY putting records in a safe or metal container? Fine—until temperatures get above 350° F. Then, an old, heavywalled ineffective safe acts as an incinerator.



4 YOU'RE COVERED by fire insurance? Read your policy. You'll find you have to prepare a proof-of-loss statement to collect fully. How could you—with records in ashes?



Mosler "A" Label Record Safe with built-in money chest for combined protection against fire and burglary

THINK what you'd be up against without your Accounts Receivable Ledgers, your Tax and Inventory Records and other vital business papers!

Don't gamble another day... or night. Protect your records and the future of your business with a modern MOSLER "A" LABEL RECORD SAFE. The "A" Label is your assurance that this safe has passed the independent Underwriters' Laboratories, Inc. severest test for fire, impact and explosion. Look for this label on your safe. Every business needs this protection. Get it today.

Mosler Safe

The Mosler Safe Company

World's largest builders of safes and vaults . . . Mosler built the U. S. Gold Storage Vaults at Ft. Knox and the famous bank vaults that withstood the Atomic Bomb at Hiroshima

Consult classified telephone directory for name of the Mosler dealer in your city or mail coupon NOW for informative, free booklet

Department D.9, Hamilton, Ohio
Please send me free booklet—giving the latest authentic information on how to protect the vital records on which my business depends.
NAMEPOSITION
FIRM NAME

CITY........STATE......

body type. While ten times as fast, the new machine is basically similar to facsimile machines developed earlier by Western Union, a pioneer in this form of communication. Whereas the standard speed for the operation of other models is 180 revolutions per minute of the copy cylinder, High-Speed Fax turns at 1,800. Western Union had a machine in commercial use for a time with a speed of 360.

Thousands of smaller facsimile machines have been installed by Western Union in business offices, hotels, and other locations throughout the country. "Desk-Fax," which puts the telegraph within arms' reach of the executive, occupies less than a square foot of space on his desk.

The new machine is expected to be built first for the use of the Armed Forces. It later may be employed by Western Union in its own intercity services and by other users with a great bulk of copy to transmit. Text, business forms, pictures, and maps may be sent with equal facility at a resolution of 120 lines to the inch which gives legible reception for even a hasty scrawl. Copy in various colors may be transmitted, but will appear in gradations of black and white.

While High-Speed Fax has the same basic principals as earlier facsimile machines, it was necessary to make numerous changes in the electrical circuits in order to obtain transmission which was faster than speech. It likewise was necessary to build the new machine stronger and to closer tolerances. New frequency standards were developed for synchronizing the speed of the sending and receiving mechanisms. It is necessary to maintain these speeds in exact synchronization to prevent wavering of the copy.

Copy, whose maximum dimensions cannot exceed 8½ by r4½ inches, is slid into a plastic cylinder. Closing the end gate sets the tube a whirling. Before transmission begins, about ten seconds is required to bring the machine up to speed. Copy is fed alternately into two transmitting cylinders. While one is operating the other is being loaded and brought up to speed. Switch-over from one to the other is automatic. A two-second delay between the one cylinder stopping and the other starting allows the machine to re-



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Write for free copy of booklet F-264 to Room 1313 Management Controls Reference Library, 315 Fourth Avenue, New York 10, N. Y. both sides of records simultaneously side by side

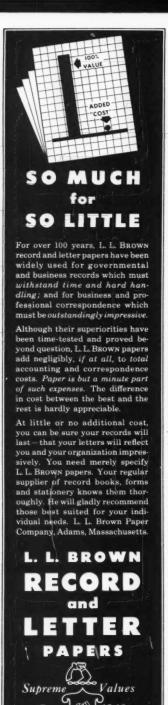
one side only using full width of film



one side onlydown half the film, up the other half (doubling film capacity)



Remington Rand



phase and permits a knife on the receiver to cut off the paper.

Intra-Plant Television programs on which top executives could be both seen and heard by workers might help to re-establish good-will which has been lost through "bigness," suggests J. Ward Keener, vice-president, B. F. Goodrich Company. He points out that large screens might be installed in production and office areas.

"Many employees' problems arise today," he said, "because some businesses are so large that the employees and top management cannot know each other, as they did in former years. If they could know each other better, a great deal more understanding and cooperation would result."

Mr. Keener indicates that an intraplant television network could present programs such as awarding checks to employees for suggestions, important customers placing orders with the company, and company-and-union grievance meetings.

Sawdust as Fertilizer—A profitable use has been found for the millions of tons of sawdust which are being destroyed annually in the United States. The wood waste may be quickly and inexpensively converted into a substance resembling decomposed vegetable matter or humus.

The rich surface soil found on the floor of an unburned forest is composed largely of lignin which comprises about one-fourth of the volume of the original wood. The cellulose portion of the rotted wood and other vegetable matter was largely destroyed by bacteria while the lignin was not.

Chemists of the Timber Engineering Company in Washington, D. C., undertook a sawdust utilization project for the National Lumber Manufacturers Association's Hardwood Research Committee. They subsequently discovered that decomposition of the cellulose could be accomplished in a few hours. A catalyst selected from a group of low cost inorganic materials is added. The mixture then is heated at less than charring temperature for under an hour. The resulting product has been named "Fersolin."

During the reaction, various volatile by-products are released which can be recovered through condensation. These include organic acids, acetone, diacetone, and aldehydes and, in the case of softwoods, there are also some terpene-like products.

Sixty tons of raw wood waste would yield roughly 48 tons of fertilizer whose price, it is believed, would compete favorably with peat moss and vermiculite.

Tests of the new product with squash plants at the Department of Agriculture's Plant Industry Station, Beltsville, Md., showed that seed germination was earlier, germination percentage was higher, foliage was greener, rate of growth was increased, more flower buds were produced, and there were indications that the presence of Fersolin keeps out moss. California truck crop growers testing this fertilizer reported favorable results with beet, carrot, and onion yields.

Infantile Paralysis—Without cost to the individual employee, infantile paralysis insurance has been added to the group hospitalization and surgical plan of nearly 10,000 employees of the Columbia Gas System. Benefits are provided up to \$5,000 for any employee or the members of his family who might be stricken with the disease.

Railroad Tickets—Business men making extended trips by train welcome an innovation by the Union Pacific Railroad. The traditional long, perforated strip of paper which has been in use for more than a century, is giving way to a booklet the size of a dollar bill, designed to be carried like currency in a billfold.

Refunds for the unused portion of a ticket are speeded up since the booklet will contain all pertinent information as to the sale and use of the ticket. Such tickets are sold at ticket offices in Los Angeles, Portland, Tacoma, Denver, Omaha, Seattle, Spokane, Salt Lake City, Kansas City, and Boise.

Factory Driving—A safety kit to aid fork lift truck operators is available to manufacturers from the Towmotor Corporation, Cleveland.

Four interior plant signs, in large face type and bright colors, caution truck operators of "Blind Corners," "Traffic Crossings," "Low Head Room," and so on. Likewise, there are four brightly hued posters in the kit, each emphasizing some element of safe fork lift truck operation. In addition, the kit contains an *Operator's Guide*, in pocket size, which emphasizes safety precautions and driving regulations within the plant.

Aluminum—To meet the demand for more factual information on aluminum alloys and mill products, *The Aluminum Data Book*, a 194-page manual, has been issued by the Reynolds Metals Company, Louisville.

It contains 117 tables concerning the physical and chemical properties of various aluminum alloys as well as mechanical properties of different classes of products, standard tolerances, weights, and standard sizes and production limits.

A form-feeding platen attachment for the International Business Machines Corporation's electric typewriter provides a rapid way of converting the latter into a continuous-forms-writing machine.

The "Pin Feed Platen," which is easily interchanged with a standard platen, has retractable pins which emerge only where necessary for the feeding of the form. When requirements of the form differ it is a simple matter to slip off one platen cylinder and replace it with another of different length or hardness.

Golden Goose—Radio advertisers aren't going to like a new gadget when and if it hits the market. It permits listeners to have advertising free programs.

Costing little and made so that it can be attached to any radio set, this gadget contains only four ordinary radio tubes. The device shuts off the set when the advertising starts and turns it on when it is over. It operates by "listening" for a program's pauses, remembering how many have passed during the preceding seconds of the program, and making its decisions accordingly. It is said to rarely fail and can even distinguish between singing commercials and other music.

The inventor, Dr. Clark Jones, mathematical physicist of the Polaroid Corporation, as a hobby evolved the blurb silencer from the electrical calculator field.

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peril. We are confronted by a revolutionary and imperialistic regime of tremendous and unexampled power. That regime has an insatiable appe-

BUSINESS ETHICS (Continued from page 17) of the dignity of man, freedom, justice, and the rule of law, stands to-day in

tite for conquest because it is committed to the destruction of the free world by its very philosophy and by its policestate methods of maintaining itself in power. In particular, that regime is committed to our destruction precisely because we stand to-day as the focus of power in the free world-the only barrier in the way of the Sovietizing of this planet.

Whatever limitations there may be in our knowledge of what goes on behind the Iron Curtain, we can be positive that no moral restraints will stand in the way of either overt or covert aggression by Communist Imperialism. Perhaps more accurately, we may say that moral restraint, as the free world understands the concept, is alien to the doctrines and incompatible with the practises of Communist Imperialism.

Crystal clear is the concept of the higher morality of that regime: that which contributes to the advancement of the regime is right, that which hinders is wrong. We come, then, to this observation: the greatest threat to-day to the "Morals of Trade" and to morality generally is the ominous threat to the survival of freedom.

However much we may deplore the many imperfections of our society and the many evidences of lapses from morality, and however strenuously we must strive to improve our society and to elevate our standards of conduct, to fail to recognize the external threat to-day to everything we are and to everything we have is the sheerest folly and the most wanton neglect of our trusteeship.

It does not lie within the nature of our free and dynamic society, nor within the genius and traditions of the American people, to remain passive.

To the far-seeing, all illusions were dispelled by the Communist seizure of the free and democratic state of Czechoslovakia early in 1048. From that date onward, recognition of the threat grew, but there remained those-in high places and low-who clung stubbornly

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to the illusion of hope in the possibilities of an accommodation with Communist Imperialism.

Those hopes were dashed by the naked aggression in Korea by the North Korean satellite and by the later compounded aggression by the Chinese Communist partner-satellite.

The Final Realization

At long last we have recognized that there can be no lasting settlement with Communist Imperialism; that any accommodation with that regime can be nothing more than a truce, a temporary cessation of conflict. We have observed from its philosophy and its practises that Communist Imperialism aims at world conquest and, therefore, can recognize limited objectives only in a passing, tactical sense.

With the unlimited objective of world conquest and with its heavy reliance on the psychological weapons of confusion, chaos, infiltration, and terror, that regime finds no need to insist on speed of conquest. It clearly does insist on a sense of direction of conquest, and well-calculated timing.

Above all, that regime has demonstrated that it can be counted on to respond to the provocation of opportunity. Opportunity, that is, to advance its cause of world conquest. That opportunity may take many forms—opportunity for infiltration, opportunity for seizure of power, opportunity for the aggressive thrust of a satellite, or perchance, the opportunity for the main thrust of its own aggressive power. All these are the openings for imperialistic advance offered by free-world weakness and signify an opportunistic schedule rather than a timetable.

We may properly search for a modus vivendi, but of lasting settlements there can be no hope. A regime which is the negation of morality and freedom cannot settle with a society dedicated to the sacredness of the human personality and in consequence to freedom and the rule of law. In the end, one system or the other must prevail as the dominant influence on this planet.

Despite the great actions that have been taken by the American Government or by the free world under American leadership, we are open to the charge that the concepts of our strategy have been essentially negative. We have sought "to contain" Communist Imperialism; we have sought "to deter" aggression.

This is not to decry what we have done nor to imply lack of recognition of the positive programs we have carried out in the economic sphere, in the military sphere, and also in the realm of information and ideas. It is, rather, merely to emphasize the essentially negative concept of our objectives.

The time has come to formulate positive objectives and to fashion a positive strategy commensurate with those objectives. The key to those positive objectives is to be found in the Preamble to the Constitution of the United States. Our fathers strove through that document to "... secure the blessings of liberty for ourselves and our posterity."

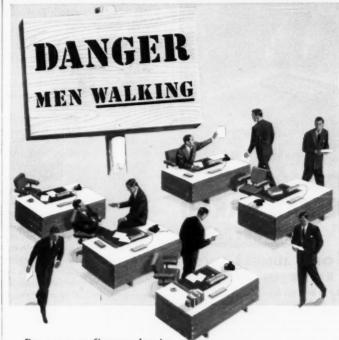
Steps to Protect "Freedom"

The task of this generation of Americans is not merely to defend our freedom, our "blessings of liberty." The task is also one of enlarging the sphere of freedom, scope-wise as well as spacewise; striving with mind and heart, through social inventiveness and otherwise, to broaden and enrich the meaning and content of freedom; and striving to assist men everywhere to secure for themselves the blessings of liberty.

Even if we would define national security in a narrow sense as safeguarding our own citadel, it is imperative that we seek to enlarge the sphere of freedom. For in an interdependent world threatened by the flood of Communist Imperialism, we must recognize that submerging of the rest of the world would so contract and enfeeble our own citadel as to destroy all hope of securing "the blessings of liberty" even for ourselves alone.

We must recognize that conquest of Asia would be but prelude to conquest of Western Europe; that possession of the Eurasian land mass and its outlying islands would be but prelude to conquest of Africa and of South America. Our citadel would then become a besieged island in a sea of hostility.

And, similarly, in terms of scope, we must recognize that the meaning and content of freedom must always move forward. Each generation must not only be prepared to defend with its treasure and its lives the heritage of freedom; it must also accept the re-



Ever stop to figure what it costs you each time an employee drops his work to deliver messages or get information?

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sponsibility of broadening and enriching the concept of freedom. To do less is to imperil the heritage.

Formulating a Plan

To safeguard our heritage of freedom and to fulfill our destiny as the symbol and shield of the free world, the times force upon us recognition of three basic, global objectives:

1. To secure our own citadel, through strong adherence to and vigorous pursuit of the objectives stated in the Preamble to the Constitution, with particular reference to the shaping of a shield for "the common defense."

 To enlarge the sphere of freedom, scope-wise, through broadening and enriching the meaning and content of freedom.

3. To enlarge the sphere of freedom, space-wise, through assisting men everywhere to secure for themselves "the blessings of liberty."

Provision for the common defense is the most traditional of all our governmental functions. What is new is the global expanse over which in some measure both commitments and deployment must extend in the interest of the common defense. Given a global-threat to the survival of free societies, and therefore to our own survival, we are confronted with global obligations.

Not all areas of the free world are of equal importance to the survival of free societies, and in any case resources for defense are scarce. We face, therefore, the necessity for a schedule of priorities.

Naturally first on that schedule comes our own citadel, as the hard core or nucleus of strength of the free world. Beyond that point, controversy enters, and there are powerful arouments in support of defense of Western Europe, of the Western Hemisphere, of the chain of islands in the Western Pacific, and of strategic outposts elsewhere. In all of these arguments we are faced with a complex of military, political, economic, and social factors. However much we may dislike to admit it, we are already engaged in twofront conflict, though happily not fullfledged global war. To secure our own citadel, then, or to provide for the common defense, it has been required of us that we deploy our forces both east



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Holding to "Our Way of Life"

Military power alone—the common defense—will not suffice to secure our citadel. We must also pursue with vigor all the high aims of the Preamble to the Constitution. Fidelity to those aims requires that we do all within our power to see that our free society functions justly and effectively.

To do so is to secure and strengthen its hold on our own people and on other peoples of the free world, and to maximize its attractiveness to the peoples behind the Iron Curtain.

Though we rightfully assign high priority presently to the shaping of shield and sword, we must be ever vigilant in defense of all the freedoms that characterize our society, ever zealous in pursuit of justice and the general welfare.

For those of us who are concerned with the field of business and with the field of business education, there is a particularly heavy responsibility. Our business enterprise system constitutes a way of life for almost two-thirds of our gainfully employed population; and all those who man that system, from the executive level to the lowest brackets, must increasingly be made to feel a sense of participation.

No economic system is an end in itself. It is rather a means to the end of providing the goods and services required in the maintenance and upbuilding of the standard of life and a means of fulfilling man's craving for a sense of participation. Business leaders who are sensitive to their social obligations see in these means the opportunity to advance the ends of a free society. And those who are blind to their social obligations are a menace to the survival of our business enterprise system, a menace to the principles of morality.

These words constitute no call for softness, for business management in a free society demands tough-minded competence, courage, alertness, imagination, a sense of strategy, and skillful command of tactics. Indeed, the survival and future well-being of the entire free world depend in a very real sense on the competence and toughness of fiber of those who manage the American business enterprise system, as our



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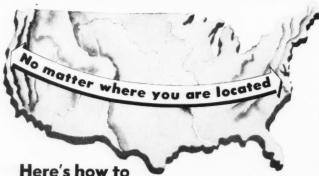


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production and our economic and military aid programs eloquently attest.

But management which is blind to moral and social values can be credited with tough-minded competence only in a short-run sense, which can only be described as shortsightedness and, hence, soft-mindedness in the longer view.

Freedom is a jewel of many facets. As our society has become more complex, we have come to see the facet of economic freedom. More particularly, we have recognized that access to economic opportunity is also essential to man's development and fulfillment in a free society.

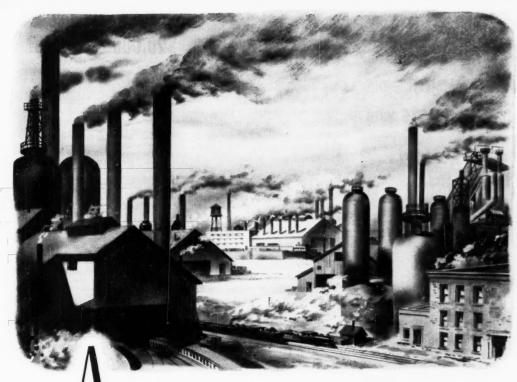
We have learned that to secure economic opportunity demands social inventiveness, skill in the shaping of public policy, and both imagination and wisdom in the reshaping of our legal framework. Likewise, we know that access to economic opportunity demands growing skill in the management of our business enterprise system.

Diffusion of Power

Through many methods and devices, we have moved in the direction of a redistribution of power, a diffusion of power. This diffusion of power has taken many forms, as between government and business, as between management and labor, as between agricultural areas and urban areas, as between eastern and western economic development, as between northern and southern economic development, as among competing forms of transportation, as among competing sources of energy, as among competing uses for a given raw material, as between synthetic and natural products.

There are psychological facets to the jewel of freedom. Perhaps it may be said that after man's elemental needs are met, his most urgent need is a basis for self-respect. Men crave a sense of participation, a sense of belonging, a sense of contributing to worthwhile aims, the opportunity for craftsmanship at all levels of work.

Notable advances have been made in our society in these areas. The arts of personnel administration have gone forward, and new concepts and goals have been formulated in the sphere of personnel training and morale building. And through both labor and manage-



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ment contributions, phenomenal gains have been made in employee relations and labor-management co-operation.

None of this progress is commensurate with the needs of our society, but it is pointing in the direction of those goals and adding to the warmth of our human relationships.

We are today engaged in global conflict. Two sharply divergent systems of value are contending for supremacy, each having as its goal a one-world concept. Communist Imperialism seeks through violence and conquest a oneworld of Communist states, subservient to and controlled by the power complex of the heartland of International Communism. The free world seeks through peaceful change and economic progress a one-world of free and independent states upholding the rule of law under the United Nations and to peaceful cooperation and interchange of goods and ideas in support of the development of mankind-a hegemony of freedom.

Irrepressible Conflict

Clarity of perception requires that we recognize that these opposing systems are irreconcilable and that conflict on some level is irrepressible. But because we seek a peaceful world, we must cling tenaciously to the hope that this conflict will find its settlement ultimately in the hearts and minds of men; that mankind will be spared the terrible scourge of global war. However slender that hope may appear to be, now or in the future, we must be sustained in our efforts by our faith in the ways of freedom, by our conviction that the values of our way of life are the superior values, and that men everywhere will in due season turn to the blessings of liberty.

Freedom cannot be bestowed on any people, and certainly it is not a gift to the world that can be purchased with American dollars, or any currency other than the efforts of those people who would earn freedom for themselves. Freedom must be won by the sacrifices of those who would enjoy its blessings.

But a helping hand can be extended to those who struggle for freedom. And what is more, the bright light of freedom can be held up before those who have never known the meaning and content of freedom, and before

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If interested, write to Funk & Wagnalls Company, Dept. DR 951, 153 East 24th Street. New York 10, N. Y. A penny postcard will do. There is no charge for the booklet.



those who must await a more favorable time to seek for themselves the blessings of liberty.

Perhaps the brightest light, the light that will penetrate deepest into the hearts and minds of men, is the light of precept and example, both within our own domain and in our relationships with the rest of the world.

Already we have embarked upon powerful programs aimed at carrying out our obligations of extending a helping hand. Among these are our programs for economic and military aid, technical assistance, educational exchanges, and the Voice of America.

All these programs are weapons in our global contest with Communist Imperialism, and they must be used with all the skill at our command and backed up by powerful resources.

Attributes We Must Have

Like all worthwhile aims of the good life, our global objectives will demand, in conception and planning, intelligence and bigness of heart; in execution, toughness of mind and fiber; and, withal, resoluteness of spirit and determination of purpose in the dark days of despair as well as in the bright days of victory and well-being.

All of these virtues are in keeping with the finest elements of the American character and are worthy of our heritage as a free society. These objectives are incumbent on us, not only in fulfillment of the rôle of leadership of the free world which destiny and Providence have thrust upon us. They are incumbent on us above all because they are essential to the safeguarding of our own citadel and therefore are part and parcel of our never-ending struggle to secure the blessings of liberty for ourselves and our posterity.

Of all the ideas generated in the upward struggle of man on this planet, the most fundamental, the most universal in appeal, the most explosive, is the evergrowing concept of freedom.

In setting before ourselves the objectives of broadening and enriching the meaning and content of freedom, and of assisting men everywhere to secure for themselves the blessings of liberty, we shall be acting greatly; and our trumpets will sound for all the world to hear—and the world will hear—"a note of daring, hope, and will."

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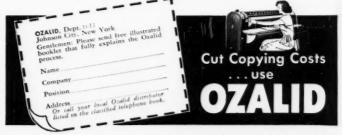
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FOUNDATION

(Continued from page 22)

myself, worked like beavers getting prices of materials and machinery, but under cover as we did not wish it known that anyone was submitting a bid on what was generally considered an asinine proposition. The Great Day came. The bids were to be opened in public at 8 p.m. in City Hall.

At the appointed time, the Mayor and Board of Alderman took their seats. The hall was jammed, and bets were freely made as to whether any bona fide bids would be submitted. At eight sharp the Mayor announced the Board would listen to any proposals. I held back, waiting to see if any other bidder appeared. To my amazement and consternation, up rose Mr. McArthur, the impressive president of the biggest engineering construction firm in the USA. What chance had I, still in my twenties, with our little outfit, against this colossus?

According to the conditions of the letting, proposals were to be divided into two parts, one stating the price for doing the work, the other outlining the financial plan under which the money would be provided. Mr. McArthur read the first part of his proposal. His price was surprisingly near our own, and this gave me confidence in our figures. When he came to the financial part, he frankly admitted that he had not worked out a definite plan, but he felt confident that with their extensive experience and financial resources, they could evolve one.

The Mayor hit the nail square on the



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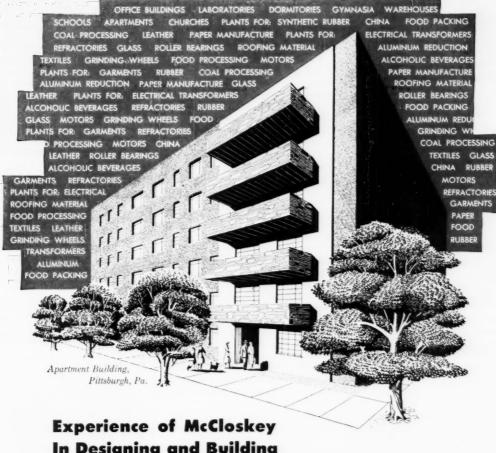
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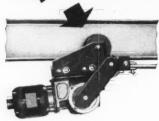
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head. "I don't see that there is anything definite in your proposal, Mr. McArthur." I breathed easier. "Is there anyone else prepared to submit a proposal?" It was now or never.

I rose and took McArthur's place. I was very conscious of the contrast between us—the two extremes of the Noble Order of Contractors. I read our proposal, stating the contract price for the work to be done.

"Have you a financial proposal, Mr. Remington?"

"Yes, sir, I have—a very definite one. I would like to tell you who is the author of it before going any further."

Everyone there either knew Mr. Griffen, my lawyer, personally or knew of him. With a suitable eulogy, I introduced him and added that I felt he, as author of the plan, was more competent to explain it, as well as to answer any questions, than I was.

Mr. Griffen came forward and took my place. He was a master of clear, lucid, and convincing English. He wound up by stating that he unequivocally staked his reputation on the legality and soundness of the financial proposal.

After some questions, a member of the Board rose, made some complimentary remarks about our proposals and the way they were presented, and moved that they be accepted and that a contract be entered into, subject to the approval of the City Council. Moved, seconded, and unanimously carried. Then the crowd gave tongue. Young as I was, I felt ten years younger when it was all over.

Over the Hump

But there was still a hurdle before we were in the clear. Our little capital was entirely inadequate to carry this big undertaking. Two things pulled us through. First, my banker, without my asking him or saying a word about money, said, "Frank, you're going to need money to get started." He pressed a button and when someone appeared, ordered, "Put \$10,000 to the credit of Mr. Remington's account." No security asked, not even a note.

The second thing that enabled me to provide the needed capital was a clause I had insisted on being inserted in the Hammond contract, whereby I was to be paid each month 90 per cent



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of the cost of all material delivered on the ground and accepted by the chief engineer. The biggest item of cost was the one calling for the furnishing and laying of six miles of 18-inch cast iron pipe. Never before had such a large order of pipe of this size been placed, and I was hounded by all the big foundries in America, each trying to knock down this succulent plum. It was a buyer's market. I was able to close a contract with the concern which had the biggest capacity on the basis of payment 90 days after delivery on the ground. As my contract with the city called for payment to me every 30 days for 90 per cent of all material delivered, I thus had the use of a large sum of money between the time the city paid me and the time I paid the pipe company. This provided a large part of the working capital I needed.

Ending a Partnership

We had the job about half done when our bookkeeper came to me and said he was convinced that Jenkins, my partner, was feathering his nest by padding the payroll with fictitious names. I paid the men off myself: I would call a man's name, and when no one appeared, Jenkins would say, "I know him. He's sick, and I'll see he gets it." And I would give it to him. It was an easy matter to check up. Jenkins, after some blustering, admitted his thefts. Our partnership dissolved.

Gradually, we reached our goal. There were anxious days and nights when, with a crew of divers, we were laying the intake pipe in Lake Michigan. The least flutter of wind at night would wake me-a storm could have wrecked our equipment and ruined us. The never-to-be forgotten moment was the test of the whole system when, in the presence of the Mayor and the Board of Aldermen, we had to carry a pressure of 300 pounds to the square inch on the six miles of pipe for five consecutive minutes. This was a very excessive pressure and a great strain on the 1,965 joints.

When the time for the test came, all hands gathered in the pumping station on the shore of Lake Michigan. The test was made under the direction of the city's consulting engineer, Mr. McClellan, a dear old man whom I had gone to many times for advice and

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Silently we watched the great Worthington engines start forcing the pressure up until the whole building seemed to throb. All eyes were glued on the pressure gage. When it registered 300, McClellan called, "Are you ready, Remington?"

"Yes."

I watched the second hand of my watch as it slowly crawled around the dial. Beads of perspiration covered my forehead. A glance at my old friend showed that he, too, was under the same strain. At last the longest five minutes of my life were over and the welcome shout of "Time's up!" brought relaxation and congratulations. The system was officially accepted. It was a job we had reason to be proud of, and it netted us nearly \$100,000.

On to New Goals

We were now a contracting outfit of good repute, and ready to go places. And we went. One place I particularly remember because of the amusing situation which arose there, was Troy, Ala. We made a contract with the town to build an entire water works system for them. Before starting work, I sent our chief engineer, Mr. Smith, down there to look the ground over. Smith was much older than I was, and in true Southern style they began calling him Colonel Smith. When I turned up-the boss-they didn't know what to call me. My years suggested "Captain," but how could they call me "Captain" when my subordinate was already a Colonel? They were stumped and quite embarrassed and frankly told me so. In the deep South in those days titles meant a lot. They compromised on "Boss."

Two contracts we undertook in connection with the World's Fair in Chicago in 1892 were interesting in that they marked a new step in traffic propulsion. One was the construction of the elevated railroad which wound around the whole area of the grounds. The uprights were 16" by 16" posts of yellow pine timber, the largest order of timber of that size ever placed up to that time. This was the first time the third rail was used in electrical propulsion. Mr. Bion Arnold, who later became one of the greatest electri-

cal engineers of the country, made his debut on this job; so also did Sam Parks, in the modest rôle of an ironworker. Later Parks became the labor czar of New York City and reached colossal heights of power.

The Case of the Moving Chairs

The other contract was for the construction of an elevated moving sidewalk by which the inventor, a German named Schmidt, fully expected to revolutionize the transportation of crowds in congested cities. It was an ingenious device by which one stepped from a stationary platform onto one which moved at a comparatively slow pace. From this one stepped onto another platform going at a much faster pace, on which there were seats. Getting off, one reversed the process. Schmidt had secured the backing of some wealthy and influential people. We were given the contract to build a trial structure which ran around in a huge circle. Schmidt gave us very carefully worked out plans: we built the sidewalks exactly as called for by the specifications, under Schmidt's watchful eve.

For the great opening, Schmidt invited the Mayor of Chicago and many other distinguished people from New York and elsewhere. It was a very dressy affair. Schmidt wore red bushy whiskers, a silk hat, and a cutaway coat. The crowd assembled and filled the platforms. Schmidt and a few friends stood on a slightly raised platform to turn the switch which would start the sidewalks moving. There was a breathless silence. He turned the switch. The wheels under the walks buzzed around on the rails a mile a minute, but not a platform moved. The awful silence, except for the buzzing wheels, continued. Schmidt looked at me and I looked at him. I motioned to him to shut off the switch. I thought he was going to fain. It was certainly an awful

As Schmidt alternately tore his hair and his whiskers, a cool-headed foreman whispered in my ear. "There ain't enough weight on the platforms to give traction to the wheels." Of course he was right. We had a number of east iron blocks weighing 1,000 pounds each, stored in a pile nearby. With a movable derrick, we soon had a number

of them scattered about on the platforms. Schmidt, his collar gone, his silk hat all mussed up on the back of his head, again faced the switch. Away the walks went to the tune of a rousing cheer. We all shook Schmidt's hand. All he could say was, "Ach mein Gott, mein Gott'"

A great deal of money was spent in efforts to get this invention introduced in New York City, and at one time it looked as though it was going to be a go, but something failed to click somewhere for Schmidt and his moving sidewalk finally became only a memory.

Disaster

With grim appropriateness, our promising little firm got its deathblow at the hands of the city which gave it birth-Chicago. It was on the great Drainage Canal the City of Chicago built to connect Lake Michigan with the Illinois River, thereby reversing the flow of a filthy, sewage-laden stream from the lake into the Illinois River and thus eventually into the Gulf of Mexico. We had taken under contract the building of a section of the canal, relying on the accuracy of the borings made by the engineers, indicating the nature of the sub-surface conditions. These proved to be wholly false and misleading. The canal authorities finally recognized that a reclassification had to be made of the costs if they wished to have a solvent contractor left on the canal. Before that time came, however, a number of us, unable to stand the gaff, folded up.

On my 36th birthday I again faced the world without a cent. Worse, this time I had a debt of \$20,000 hanging around my neck.

The second in this series of three articles containing Mr. Remington's reminiscences of adventure at home and abroad will appear in the October number of Dix's Riview.

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SMALL BUSINESS

(Continued from page 19)

to avoid paying excess profits taxes. Wouldn't it be far more rational—and beneficial to the economy—to put a premium on efficiency, enabling a company to reduce prices and make greater profits? Profit should not be looked upon as a sin. It is a vital necessity for business, for labor, for government.

How then can small business attract equity capital? The answer is by selling its stock to the public. In this case the public means the local doctor, the corner druggist, the filling station owner, and so on. These are working people who are looking for productive investments for their savings, but hesitate to "play the market" or to buy into some unknown colossus. Yet, they will buy stock in a local plant or business because they have confidence—and can take a real interest—in "their" company's progress. They can "see" it.

This year our company began to sell its stock to the people of our community. It sold 25 shares here, 50 shares there. Ten shares were sold as a birth-day present for a young woman. A housewife who had made a little profit in another investment put it all into 200 shares as a long-range speculation.

The stock was sold purely as a speculative stock; no dividends for at least two years, only an investment for the long pull and possible capital gain. No rosy pictures were painted. Yet people bought because it was "their" company.

Soon, judging from present indications, all the stock will be sold, and the company's proceeds will be \$188,000 when the sale is completed.

Expansion capital is waiting at the corner for a small company with a healthy potential. For there are the people who had never before bought stock but who are part of a new capital pool for small business.

The salvation of small business is to sell its stock publicly. If the small business man has faith in his own ability and his company's future, he believes it will grow. If it flourishes on the basis of selling stock, his percentage will net him as much—or more—than his former ownership. In other words, it is better to have 10 per cent of a \$10,000,000 business than 100 per cent of a \$500,000,000 one.



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Allocations of materials hits the small business man the hardest. First, the financial burden of conversion and the turmoil in securing government defense order business make him late for defense order supplements to allocations. Second, because of the fluctuating, fluid nature of most small business concerns, allocation rules don't fit them.

Effect of Allocations

In the allocation of materials, a base period is set. What base period is fair for small business? Let us say, "first half of this year." The already tight materials situation was such that it did not allow small business to operate profitably or to take care of normal growth. Thus this base period is a sharp turn of the vise to start with. It cuts back too severely from what is needed in the normal course of events by trying to determine a "normal" past usage and applying it to a changed present and future.

Take the case of our company, for instance. We had no steel buying record and did very little business and made no money for about 25 years. When our new management took over the reins, we began to grow. We needed ever increasing amounts of steel, but did not even get enough to run existing equipment in most periods. In January and February of last year, we received virtually no steel. If this had been set as our base period when steel was allocated, we would have been out of business in no time.

Big business, on the other hand, is not the fluid operation that small business is. It has had relatively steady supplies in the past—over a period of years—and a cut in its allocation of materials simply cuts its whole volume by that amount. It is still possible, however, for big business to maintain a level profit percentage.

In contrast, the small business man's situation is this: he is already getting to per cent less than what he really needs to run his equipment and expand his present sales. His normal growth pattern calls for another 20 per cent expansion (and hence more materials), if he is to achieve a sound operating volume. But if his allotments are cut 20 per cent from some "past" base—not a determined normal or



Of all the methods available for cold-shaping flat rolled metal, the cold-roll-forming machine offers the highest production per man hour and the lowest conversion cost. It is often a good investment even when operated only a few days per month. Of still greater importance than conversion cost is often the saving of weight which may be effected by designing light, strong box, tubular and other special structurals to take the place of hot rolled angles, channels, tees, etc. Material savings up to 50% are frequently made.

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necessary usage—he stands a chance of being squeezed out of business.

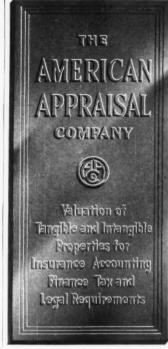
How then does the business man go about saving his business by securing materials? There are a number of things he can do, but none is easy.

1. The small business man must get out and "sell" his suppliers. He must go straight to the mills, if necessary. He should tell his suppliers and the mills his situation. He should not hesitate to beg. And he'll get results if he's honest. If a supplier has 20 critical accounts, but one of them uses as much material as all the others put together, it is just plain logic for the supplier to try to satisfy more customers with less material by trying to take care of the little fellows first. Now, out of 19 small business men, if two are aggressivevet not awful nuisances-they are going to get attention. These two are sympathetic to the supplier's situation, they keep the supplier informed about their own situation at all times, and they do not try to get too much from their supplier. The personal aspects of business are still strong to-day, and the small business man has a greater chance to use them and, thereby, a better chance to get results.

2. Small business should make a strong pitch for—and secure—defense orders. More and more defense orders are going to small business, but the individual must get out and nail down the contracts for his company. The latest Department of Commerce figures for this year on the percentage of war work going to small business firms are:

Government officials are aware of the important rôle in the defense economy played by small business. Recently, Secretary of Commerce Charles Sawyer said:

"It is of the utmost importance not only to mobilize the productive facilities of small business for effective use in this time of emergency so as to broaden the productive base, but also to preserve small business during this period of mobilization, when it is



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impossible or difficult for small, independent business men to obtain the materials they require, to maintain them as effective units in our civilian economy. Small business comprises nearly 90 per cent of our business establishments, employs nearly half of our non-agricultural workers, and handles over one-third of the total volume of business. I strongly believe that there is need for additional statutory provisions for assistance to small business at the present time."

A Selling Job

But small business must not waitcannot afford to wait-for the wheels of legislation to save it. Small business men must get out and get war orders to equal business lost by government restrictions. There will be many heartaches and much red tape for the small business man seeking war work, but he must not become discouraged. It takes time. For instance, after two years of work, our company just received a \$500,000 war order for the next six months, and this will be repeated. But, right up to the last day, it looked very discouraging. However, it came through. Many small business men, because they are busy and involved with immediate problems, drop war contract leads too fast. They should stick with them, and the chances are same contracts will come to them if they follow up their leads to the finish.

3. Plead hardship where and when it actually strikes. Small business men should keep in close touch with the Department of Commerce. They will find that they can get quick relief—if the staff can keep up with the flood-from real hardships under allocations.

Controls are naturally designed for big business, for that is the only segment on which enough statistics are available. But government officials have learned that there must be good relief and escape clauses for hardship. Therefore, if a small business man presents his case completely, in a well organized and easy-to-digest presentation, and he takes care of each step personally, he can often get relief. Certainly he will need patience and perseverence, but if he has these, he'll secure the desired relief, or some portion thereof.

4. Small business should not over-

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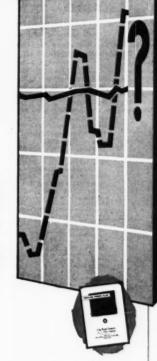
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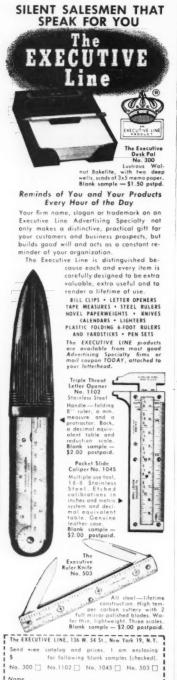
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But the small business man must still be a darn good salesman. Government orders or subcontracting work will never just be "mailed in." The small business man who gets these orders works long and hard for them, but he gets them.

You can get them too.

SUBCONTRACTING

(Continued from page 19)

2. The items you now are making, items previously made, and the processes employed in making them.

3. Any previous experience as a subcontractor, names of companies for which you subcontracted, and items so produced.

4. An estimate of your available machine capacity.

5. A listing, with brief descriptions, of the types, kinds, sizes, and conditions of your machines.

6. The tolerances to which you usually work, and the closest tolerance to which you can work.

7. The materials you use, in order of greatest use.

8. The number and kinds of employees on your payroll, including qualifications of key personnel.

q. The current financial condition of your plant.

10. The nature of your cost records, including the length of time they have been in use.

11. Transportation and shipping

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LEARN TOGETHER

Continued from page 201

general strikes which paralyzed the Passaic-Paterson area in 1925 and 1926, and the catastrophic years of the Great Depression. In 1935, through the indomitable efforts of its new president, Colonel Charles F. H. Johnson, the company's debts were liquidated and it was put on a workable financial basis. Since then, the company has been very successful.

In August 1944, during the absence of Colonel Johnson in service with the Army, the Textile Workers Union of America, CIO succeeded in unionizing the plant. A contract along the line of the union's usual practices was nego-

In a very short time, the lack of experience of the supervisors and shop stewards in carrying out the grievance procedure became all too apparent. Grievances were reported in large numbers and all but the simplest were passed up to the fourth step (Director of Labor Relations-Business Agent) without settlement, comment or suggestion on the part of the principals in previous steps.

Education and guidance at the first three steps of the grievance procedure were imperative if congestion and delay at the fourth step was to be avoided. A special course of instruction for supervisors was prepared in the industrial relations department and presented to the President for approval. He insisted that the inexperience and failures of shop chairmen and shop stewards contributed as much to the existing confusion and friction as did that of the supervisors. Effective joint training appeared to be the practical solution.

President Johnson conferred with George Baldanzi, Executive Vice-President of TWUA, CIO and informed him of the advisability for joint training: Baldanzi concurred entirely with the president's attitude. Through Baldanzi's efforts and those of Charles Serraino, the regional union representative, the proposed course for supervisors was revised to apply to both supervisors and union shop represen-

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tatives. The instruction was then initiated.

The course consisted of an introductory program, fifteen instructional sessions, and the graduation exercises. The introductory program was held in the mill cafeteria at a dinner given by the company for supervisors, union shop representatives and other key company and union personnel. The president of Botany, the president and the executive vice-president of Textile Workers Union of America, CIO and Botany's director of industrial relations addressed the meeting, each from their respective viewpoints. This initial introduction was vital; it assured those concerned that the instruction was endorsed by top authority and must be given serious attention.

Free Discussion Urged

The training was given on company time and the attendance was compulsory. Classes were an hour in duration. All supervisory personnel up to and including assistant superintendents were required to participate. Similarly, all shop chairmen and shop stewards were required to attend. Supervisory personnel and union shop representatives, not to exceed a total of fifteen were assigned to each training section.

With the concurrence of the union, the classes were conducted by the director of industrial relations and the director of labor relations at Botany Mills. The union was represented during the instruction by either the business manager, the business agent, or the training director for the joint board. The union instructor group attended classes, elaborated on the union viewpoint in discussions and voiced their opinions when they felt that the instruction was not fully in accord with union thinking. They also answered questions pertaining to union activities.

Lecture-conference methods of instruction were followed. Much of the instruction was in the form of questions and answers and all members of the class were encouraged to participate in the discussion. Men and women were assigned to the same classes. There were about 350 supervisors in the mill and 70 union shop representatives; all but those absent took the course.

At the close of each class-room session, the participants were given



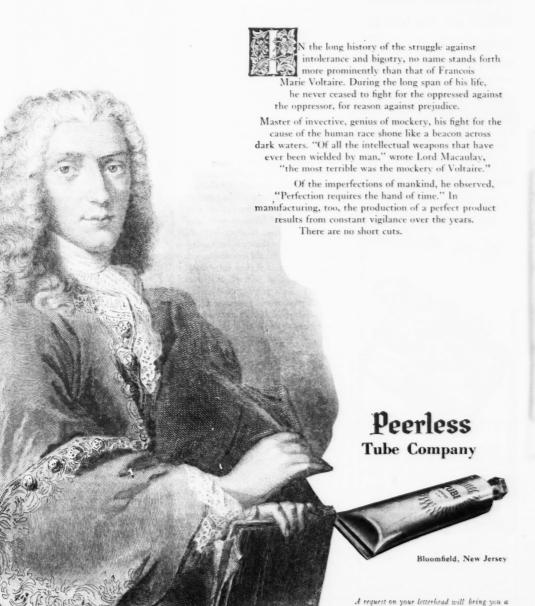




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mimeographed copies of the discussion topics to file in loose-leaf binders provided by the company. At the end of the course, this subject matter, with some revisions, was printed and bound in special loose-leaf binders together with some supplementary information.

One of these manuals was presented by the company to each employee who completed the course for his or her permanent use. The plan is to revise the contents of this manual as often as necessary to keep it current, thereby providing each supervisor and union shop representative with an up-to-date loose-leaf labor relations manual applicable to Botany Mills. This manual is called "The Botany Plan."

What Was Taught

The course was prepared solely for use at Botany Mills. The widespread interest and discussion it has provoked were neither anticipated nor sought. The unique part of the undertaking is the sincere cooperation and mutual understanding which characterized the relations between the company and union in all phases common to both. Joint training has been tried out many times before, but not, so far as we know, with the complete integration from beginning to end which characterized the Botany program.

The fifteen hours of instruction which comprised the course were distributed as follows:

Objectives and Indoctrination (Introduction)

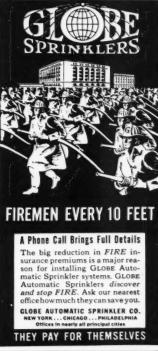
General Personnel Policies (2 hours) Foundations of Good Human Relations (1 hour)

Four step Method of Arriving at Conclusions (2 hours)

Grievance Procedures (2 hours) Memorandum of Agreement (Contract) (6 hours)

General Review and Test (2 hours)

Tersely stated, the objectives of the course are: "Through joint training of supervisors, shop chairmen and shop stewards; to promote a better understanding of the employer-employee relationship at Botany Mills Inc.; to impress all with the community of interest and responsibilities which the Memorandum of Agreement establishes; to become better acquainted one with the other; and to provide uniform





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procedure for dealing with problems and differences which arise in the course of this relationship."

In conducting the instruction, some difficulties were encountered. Only by repetition and insistence, were some of the older employees made to understand that the human relations element of the supervisor's task is basically a production responsibility, equally or more important than the other responsibilities of his job. Many of the supervisors had been selected for their technical qualifications, long service, and devotion to duty. Some of them thought that human relations should be handled jointly by the experts in the Personnel Division and the experts in the union.

Leadership Qualifications

Others thought that the Memorandum of Agreement was a set of fixed rules, complete adherence to which would solve all the problems that could arise. If a grievance was not contained and solved in the printed contract, it was, in their opinion, of no significance.

How to arrive at a suitable solution to a problem in personnel relations was an enigma to many. For years they had reasoned with their emotions and felt no need for a logical procedure to follow in reaching sound conclusions. That union shop stewards could question their decisions as to wages, hours and conditions of employment irked many of the supervisors. And some of the union shop representatives had been elected to office without any



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definite conception of their part in grievance procedure, or any talent in making the procedure effective.

Few, if any, of the employees were familiar with either the provisions of the union contract or their real meanings. This closed-mindedness was expected at the outset and has not been entirely eliminated at this time. Actually, complete understanding should not be expected for some time.

By insisting on suitable leadership qualifications for new personnel both in supervision and among union shop representatives, these problems can eventually be solved. But it is hardly fair to discharge experienced, capable employees because some of the requirements of their jobs have changed. Time removes the less skillful; and until then, assistance in handling people should be made readily available to all.

Diplomas for the Workers

Upon completion of the course, distinctive engraved diplomas were awarded to those that successfully graduated. The diplomas were signed by the general manager of the company and by the executive vice-president of the union. The recipients of these certificates of graduation from the joint training course prize them highly.

The first graduation exercises were held in the evening at the mill cafeteria which was filled to capacity. The graduation ceremonies were dignified and fitting. The speakers were the same that addressed the class at the opening exercises. Following the graduation ceremony, an elaborate buffet supper was served.

The dignity with which the course was presented contributed in no small degree to its prestige. The company felt that if it was worth doing at all, it merited every consideration. The results entirely justify this sentiment.

Concrete benefits accruing from this training are readily perceptible although exact evaluation is frequently impractical. Certainly, the initial purpose of having grievances handled in the lower steps of the grievance procedure has been satisfactorily accomplished.

Certain types of grievances particularly those that pertain to hours and wages, must necessarily be finally de-



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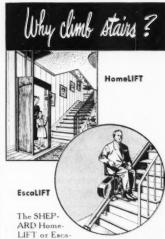
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BUSINESS IN MOTION

To our Colleagues in American Business ...

War is notorious for wasting lives, money and materials, but, it is also responsible, at times and in a somewhat indirect way, for progress in scientific and practical matters that eventually are turned to valuable peace-time applications. A few such byproducts are rather widely known; atomic energy, for example. Recently there has come to Revere's attention an instance that is much less important and spectacular but which is worth discussing. It might be called "the case of a case."

During the war, one of Revere's customers made 4.5 howitzer cases out of cartridge brass. The case

was 3¾ inches high, with an outside diameter of 4¾ inches. The walls were thin, and the base thick. Integral with the base was a heavy flange, ⅓ inch thick. Inside, the base was ⅓ inch thick. Since the case had to be a single piece of brass, the flange had to be generated by flowing the metal from the base after the preliminary cupping operations. Many problems were solved in the successful production of this case, in con-

nection with the metal, tools, lubricants and production controls. This particular firm developed procedures that were somewhat unusual, which speeded production, realized economies, yet met strict specifications.

After the war, this Revere customer was asked by a clock company if it could cold-form clock cases out of brass, the purpose being to replace a heavy casting with a lighter stamping. Drawings of the clock case showed its dimensions to be close to those of the howitzer case, and in other respects the similarities between the two were striking. The most im-

portant difference was that the large radius on the inside of the howitzer cases was not permissible for the clock, because of the space required for the works.

In order to provide a thinner base, and one that was flat both inside and outside, only a few manufacturing changes had to be made. The knowledge acquired during the war was applied. The bottom design was achieved by squaring the case to the exact height, providing the bottom knockout with exactly the correct amount of spring tension in the restrike, and carefully governing the pressure and

speed of press travel. If this sounds complicated to the average reader, it was simple to the men who had made millions of cases for war. They coordinated all the factors, produced perfect clock cases, and thus provided another example of the adaptation of a war product to a peaceful use. The case is handsome, accurate in all dimensions, and costs only about a third as much as the previous case, which was a machined casting.

Let us hope there's not another world war, but if there is, remember that suppliers in all lines will learn something new. And do not forget that the firms from whom you now buy, no matter what it is, may have new knowledge that may save materials and reduce costs, in these days when it is so important to do both. Inquire of them what they can do for you that is new. Instead of merely duplicating previous orders, ask your suppliers what they have, or know, that could be of value to you. The results may surprise you very pleasantly indeed.



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termined at the top management level. Such grievances are brought directly to the attention of the director of labor relations, who secures any information he needs from the employees that handle grievances at lower levels.

Co-operation Benefits

The relations among supervisors, union shop representatives and workers are now far more pleasant, sympathetic and understanding than they were formerly. Each is assured of his proper place in the grievance team and is privileged to act accordingly. Personality classes sometimes occur and must be expected where people with diverse purposes and different points of view must settle controversial issues.

To assist the superintendents in administering the first three steps of the grievance procedures, trained personnel from the Industrial Relations Department are available. The liaison personnel have proved very valuable in helping superintendents and supervisors both in the more intricate phases of settling grievances and in handling cases which present unusual human relations problems.

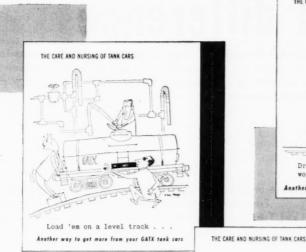
This assistance, particularly if the supervisor is inept or inexperienced in presenting the company's viewpoints, has permitted supervisors lacking in human relations know-how to perform satisfactorily. This interim arrangement is the best that can be contrived during the period that less skillful supervisors are being strengthened in their personnel work.

Following the completion of the instruction, there was a marked improvement in attendance, turnover rates, morale, and discipline. How much of these improvements is directly traceable to the training is problematical since there are other factors which might well contribute to such improvement.

However, wrangling over grievances at any step of the procedure delays settlement and wears on the tempers of the employees concerned. A feeling of frustration develops, which is conducive neither to the best interests of the company nor to those of the employees.

The prompt and satisfactory settlement of grievances makes for improved morale and convinces employees that







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During 1951, we have been talking to our tank car users through the business papers, by means of advertisements—each of which has emphasized some little point, perhaps overlooked, whereby better use can be made of tank cars. Some of these advertisements are shown here, reduced in size, of course. While these advertisements cannot be expected to work a miracle and produce plenty of tank cars for all requirements, we hope that the messages they bear are of some service to all tank car users having to "make do" with not enough cars.



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management is fair and concerned with their interests.

Improvements in production are equally difficult to trace and production executives are inclined to attribute betterment in this field to their own eleverness rather than to the improved attitudes of employees. However, betterment of human performance is the principal field to which management must look for materially improved production. The present productive efficiency is only a fraction of that which could be had if all of the employees delivered one hundred percent of their capabilities.

Avoiding Strikes

The armed services have known the importance of the personnel element in war for a century and a half. Now, enlightened management is trying to evaluate its true worth in the field of production.

Because joint training in human relations provides a feasible way for avoiding controversies and strikes which menace the welfare of the community, the public has taken a great interest in the Botany Plan. Requests for the instructional matter have come from all over the world; such requests are still arriving in considerable volume, six years after the plan was initiated.

Botany Mills cannot now put the project aside with any assurance that its responsibility is completed. The course must be kept up-to-date and repeated at intervals sufficiently frequent to insure that new supervisors and union shop personnel are properly trained.

The faith that the supervisors and union shop personnel have in the instruction is unmistakable; they urge frequently that the course be kept current and that it be repeated regularly. The Foremen's Association, a twenty-five year old organization for supervisors, repeatedly asks for assurance that the course will be revised and continued.

Obviously, a course in human relations must be presented periodically because of the turnover of the employees who participate in it.

Constant revision of the course is a considerable task for both the company and the union. The changes of the

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Taft-Hartley Act alone are many, as | are changes in the Memorandum of Agreement. Styles in human relations are never stable and frequent changes in the Botany Plan become necessary.

Nor is periodic repetition of the basic course sufficient. Refresher courses of from three to five sessions must be given for those who have taken the basic instruction both to remind them of changes and to review briefly the basic teaching.

Efficiency Increased

While the overall plan involves considerable and continuing effort on the part of management and the union, both are convinced that the effort is fully compensated by the increased efficiency in managing labor relations.

It must be remembered that there are three parties to the Memorandum of Agreement-the company, the union and the employees. While there is some community of interest, the interests of each are not necessarily identical. The company has a right to expect that all will contribute to the success of the business: otherwise, all three of them will be out of work.

Of course, the employee feels that he has a right to expect some benefits from the weekly contribution he must make to the union which he joins, and the union knows that if it cannot keep the employees satisfied its days are numbered. Because of the divergent interests, the close association of management's supervisors, and the union's shop chairmen and stewards in the joint training program helps materially to eliminate mutual suspicion, misunderstanding and confusion.

If such training provided nothing more than the confidence and common understanding it engenders, it would be well worthwhile. Although the shop chairmen and shop stewards are but a fractional part of the bargaining unit, they are the most articulate and active part. To them, other employees in the bargaining unit look for information, advice, and justification of the union policy.

This article would not be complete if it did not include this quotation from the address of George Baldanzi, Executive Vice-President of Textile Workers Union of American, CIO, delivered at the opening exercises of the course:

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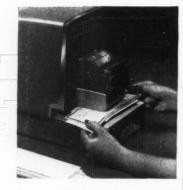
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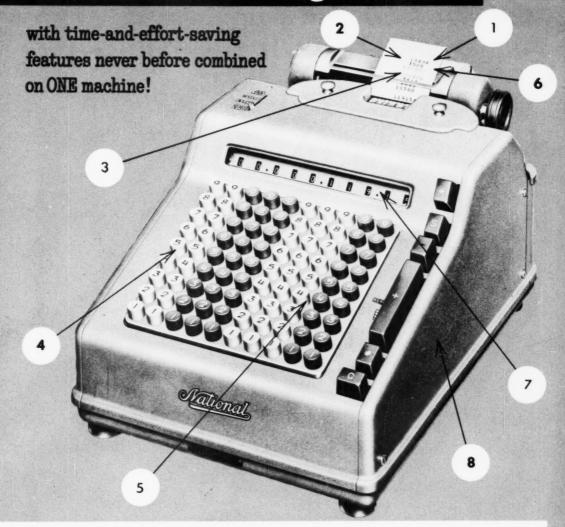
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